

Plundering the Skilled Workforce

Depriving developing nations of their most valuable assets

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Abstract

Whether developed (DC) or less developed (LDC), all countries need “Skilled Mental Labor” (SML) to use technologies effectively and to attain economic growth and development. Without appropriate SML, no country can make the best use of its firms and institutions.

Time and investment are required for an individual to become a skilled mental laborer, but these are not sufficient. The training must be at a level where contemporary technologies can be used effectively so that the highest benefit can be given to society and companies.

The most disturbing aspect of our issue is that although there are very few skilled mental laborers who are educated and equipped with modern qualifications, they generally migrate to more developed and richer countries to achieve better living conditions.

DCs countries have found an excuse for this kind of migration by saying, “We need skilled mental laborers”.

The pertinent critical questions are as follows: While it is acknowledged that Developed Countries (DCs) require Skilled Mental Labor (SML), what about Less Developed Countries (LDCs)? Do they not also have a need for SML?

The crucial and vital question is which countries have a greater need for SML, DCs or LDCs?

Keywords: Brain Drain; Migration; Skilled Brains; Development; Economic Growth; Exploitation

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People in rich countries cannot continue to ignore or overlook the fact that plenty of their neighbors (people in poor countries) have impoverished lives. Unless swayed by some self-proclaimed idea that they deserve a better standard of living, rich countries must urgently do something to change the prevailing unfair conditions. They cannot continue to live in peace and comfort forever while their neighbors continue to live poor and destitute.

To change their unfavorable conditions, developing countries need access to 'knowledge of production', i.e., technology, along with a skilled and educated labor force capable of effectively implementing these advancements.

*An old Turkish proverb says,
"Those who have knowledge owe it to those who do not have it."*

H. Gürak

Introduction¹

Developed Countries (DCs) are those countries that create new products and new production methods through technological innovations. Owing to their advanced stage of development, they are also the nations with human resources capable of effectively harnessing existing and emerging technologies.

Less Developed Countries (LDCs), on the other hand, not only have relatively lower incomes, but are also characterized by attempts to use existing technologies efficiently. This means that the greatest labor requirement for LDCs is not creative mental labor (CML) that creates new technology, but skilled mental labor (SML) that uses existing technologies effectively.

The purpose of the article

As we all know very well, there is a giant gap between the standards of general and vocational education in DCs and LDCs. Consequently, there is also a giant gap in the number of “well-educated and trained” labor force between DCs and LDCs. The critical question at hand pertains to whether this gap is narrowing or widening as time progresses.

Decision-makers in LDCs undoubtedly take numerous measures and precautions to reduce and ultimately eliminate the disparities, both qualitatively and quantitatively. However, the prevailing conditions in terms of institutional infrastructure, qualitative and quantitative features of educational stuff, and education material are all insufficient and inadequate. How can a rational and fair mind expect the gap to narrow under these circumstances?

The challenges within the educational infrastructure extend beyond mere insufficiencies and deficiencies. In particular, the most highly educated students in LDCs, notably those with promising futures, often opt to leave their respective countries in pursuit of improved living standards elsewhere. Regrettably, these invaluable and indispensable assets are frequently drained by more affluent nations.

In the context of fostering the development of LDCs and narrowing the gap with DCs, a pivotal question arises: Which group, developed countries or developing countries, has a greater need for skilled labor?

¹ I express my gratitude to Dr. Sercan Hamza Baglama for his invaluable assistance in refining the English language of the manuscript.

Undoubtedly, the evident answer lies in favor of LDCs. They possess a significantly greater need for the Skilled Mental Labor (SML) they cultivate compared to DCs. This discrepancy is highlighted by the generous strategies frequently employed by DCs to facilitate the transfer of the most skilled labor, which we refer to as “the plunder of the most valuable assets of LDCs by DCs.”

In light of the reality of ‘plunder’, this paper seeks to illustrate that LDCs emerge as significant losers, while DCs stand as substantial beneficiaries, capitalizing on the most valuable assets of LDCs. DCs' exploitation of SML from LDCs is free of charge for DCs. Costs accrue to LDCs, while DCs get the crème de la crème. This is neither economically justifiable nor ethical, and change is imperative if the goals are set on ‘bridging’ global incomes and eliminating poverty in LDCs.

The answers to the following questions are rather critical for global prosperity.

- **What measures can or should LDCs take to prevent the migration of SML?**
- **What measures can or should DCs take to prevent the permanent migration of SML into their countries?**
- **What can DCs do to increase the number of SMLs in LDCs?**
- **What measures can be taken to reverse the brain drain in LDCs?**

The analysis is based on the “**Labor Theory of Value**” as the fundamental starting point, where a laborer (worker) is considered to be the **only productive factor**² that can “add or create value.” Let us start by clarifying what we mean by concepts such as CML and SML.

New concepts³

Since, in the real world, there is no laborer with zero skills, throughout this book we will make a new but realistic and rational classification of L:

- 1- Creative Mental Labor (CML) inventing technologies, i.e., L^{CM} , and*
- 2- Skilled Mental Labor (SML) implementing technology, i.e., L^{SM} .*

SML can be further divided into three sub-categories:

² See Appendix-A

³ Quoted from, “Mental Labor” by H. Gürak, academia.edu, 2024.01.15

2-a The highly skilled labor (SML^{hs}) consists of people educated in high-tech implementation fields, such as engineers, technicians, AI, and IT experts, including doctors and nurses.

2-b The skilled labor (SML^s) consists of those who have obtained vocational school-level or equivalent formal / informal education.

2-c The ordinary skilled labor (SML^o) comprises the rest of the total labor force, equipped with ‘general’ knowledge acquired through formal and/or informal education specific to the country. No labor is zero-skilled.

To put it differently, L comprises CML , SML^{hs} , SML^s , and SML^o .

Or

$$L = (L^{CM} + L^{SM})$$

Human skills hold a central position in all economic theories, especially those pertaining to long-term growth. They serve as the sole source for all new technologies, also referred to as ‘new ideas’, originating from the CML^4 of human mind. To put it differently, ‘given’ natural inputs and skilled laborers, (SML), CML is the only source of all added-value. **Technology inventing CML** is essential to long-run economic growth and the reason the rate of profit does not fall to zero, as predicted by Marx.

The concepts of ‘ CML and SML ’ have some similar features; however, they are essentially different. CML ‘**invents**’ new technologies while SML ‘**uses**’ and/or ‘**implements**’ old and new technologies.

If an economy does not have access to SML endowed with appropriate skills and sufficient numbers, it cannot use existing technologies efficiently and achieve the expected result in terms of output and value. We frequently see examples of this in DCs. Therefore, the SML of laborers is a ‘**must**’ for production to effectively take advantage of technologies.

One should also note that the concepts of ‘labor’ and ‘laborer’ also have different meanings.”

⁴ The analysis, observations, and findings in this study do not intend to reiterate the economic doctrines of neoclassical, Keynesian, or monetary traditions, despite some potential convergence in fundamental principles. Rather, this work draws its foundation from the labor theory, following in the footsteps of prominent figures such as Adam Smith, David Ricardo, Karl Marx, and others.

However, it should be noted that none of these figures made a clear distinction between “creative mental labor” (i.e., creative mental work), generating new ideas (i.e., new technologies), and “skilled labor” (i.e., skilled work).

Some Facts about Migration

According to the United Nations Department of Economic and Social Affairs (UNDESA),

“In 2019, international migrants constituted 4.3 per cent of the working age population (aged 15 and over) while migrant workers constituted 4.9 per cent of the labour force of destination countries. Despite the global rise in the number of migrant workers over time, their share among migrants of working age is decreasing. In 2013, migrant workers constituted 72.7 per cent of migrants of working age but 70.0 per cent in 2017 (ILO 2015 and 2018b). Their share in 2019 is estimated at 69.0 per cent. The decreasing share of migrant workers could be attributed to the continuous rise in the number of migrants of working age and a decline in their labour force participation.” (ILO, 2021, p.20) (See Table-1)

Table-1 Global estimates of international migrant workers, 2019 (millions)

	Total
Migrant workers	169
Non-migrant workers	3313

Source: ILO, 2021, Table.2-1, p. 21

India tops the list of countries with the highest number of migrants with 17.9 million, followed by Mexico with 11.1 million, Russia with 10.8 million, and China with 10.5 million. (See Table-2)

Table-2 Top 10 Countries with the Highest Number of Migrants

1	India	17.9 million
2	Mexico	11.1 million
3	Russia	10.8 million
4	China	10.5 million
5	Syria	8.5 million
6	Bangladesh	7.4 million
7	Pakistan	6.3 million
8	Ukraine	6.1 million
9	Philippines	6.1 million
10	Afghanistan	5.9 million

Source: World Population Review, UN 2020
<https://worldpopulationreview.com/country-rankings/immigration-by-country>, 2023.11.15

The top 10 countries with the highest number of migrants are as follows: the USA, Germany, Saudi Arabia, and Russia. (See Table-3)

Table-3 Top 10 Countries with the Highest Number of Migrants

1	United States	50.6 million
2	Germany	15.8 million
3	Saudi Arabia	13.5 million
4	Russia	11.6 million
5	United Kingdom	9.4 million
6	United Arab Emirates	8.7 million
7	France	8.5 million
8	Canada	8.0 million
9	Australia	7.7 million
10	Spain	6.8 million

Source: World Population Review, UN 2020
<https://worldpopulationreview.com/country-rankings/immigration-by-country>, 2023.11.16

Table-4 shows the list of the top migration countries of tertiary-educated as a percentage of the total. Guyana tops the list with 93 percent, followed by Haiti with 75.1 percent, Trinidad & Tobago with 68.2 percent, and Barbados with 66.1 percent. The ratings reveal how serious the migration problem is among tertiary-educated people from these countries.

Table-4 Top migration countries of 'tertiary-educated', 2010-11.
 Migration rate % of total

Guyana	93.0
Haiti	75.1
Trinidad & Tobago	68.2
Barbados	66.1
Jamaica	48.1
Tonga	48.1
Mauritius	43.8
Zimbabwe	43.6

Congo	37.4
Malta	36.5

Source: Arslan et. al. (2014) and OECD Database on Immigrants in OECD and non-OECD Countries DIOC/2010-11; in: 'Migration and Remittances', Factbook 2016

Remittances sent to home countries by migrants constitute a significant portion of foreign earnings and reserves. Table -5 shows that India tops the list with about USD 83 billion between 2005 and 2020, followed by China with about USD 59 billion and Mexico with about USD 43 billion.

Table-5 Top 10 Countries Receiving international remittances (2005–2020)
(current USD billion)

1	India	83.15
2	China	59.51
3	Mexico	42.88
4	Philippines	34.91
5	Egypt	29.60
6	Pakistan	26.11
7	France *	24.48
8	Bangladesh	21.75
9	Germany *	17.90
10	Nigeria	17.21

Source: World Migration Report, 2022, Table.3, p.41

* The majority of inflows are salaries of cross-border workers who work in Switzerland while residing in France or Germany.

On the importance of skilled labor

Regardless of whether it is a DC or LDC, all countries require SML to use technologies effectively to attain economic growth and development. Without appropriate SML, in terms of both quality and quantity, no country can make the optimum use of its production units.

Raising the quality and quantity of SML up to globally effective levels requires a long and costly process. It requires not only basic education, but also secondary education, vocational training, and higher education. Therefore, the process of improving the faculties of SML through formal or informal training requires a continued investment in individuals, and during

this period, individuals are, in general, only consumers of resources. Time and investment are the requirements, but not sufficient. Education and training must be at a level where contemporary technologies can be used effectively so that the highest benefit can be given to society.

However, we know from the results of the international PISA⁵ data that education in LDCs is often not at the level it should be. For example, if a LDC trains 100 engineers per year, only a small fraction of them is endowed with skills at the international level. This fact shows that there is a serious problem in LDCs' educational infrastructures and programs in raising SML with contemporary abilities.

There is a seriously disturbing aspect relevant to our issue: despite a significant shortage of SML with contemporary skills in LDCs, a considerable portion, if not the majority, of such skilled individuals exhibit a strong eagerness to migrate to DCs in pursuit of a better living standard, often seeking the quickest path available. On the other side, decision-makers in DCs seem more than eager to wait with open arms to welcome “the best” of potential migrants, at no cost.

DCs seems to have found a good excuse for this kind of exploitation, saying that “We need SML.”

That is correct; DCs need SML. But the relevant/critical questions are:

- 1- What about LDCs? Don't they need SML?
- 2- Which countries have a greater need for SML, DCs or LDCs?

It is a well-established fact that both CML and SML serve as the perpetual wellspring of the accumulated pool of knowledge. It is also a well-established fact that the pivotal factor in determining the living standards of people worldwide lies in the advancement of knowledge pertaining to technologies. Furthermore, it is evident that countries with laborers endowed with higher levels of skills exhibit elevated standards of living. Therefore, considering economic

⁵ *The Programme for International Student Assessment (PISA) is the OECD's Programme for International Student Assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. (PISA - PISA (oecd.org))* 2024.01.21

growth and development, access to “productive knowledge,” i.e., technology, and a properly qualified labor force are “sine qua non” inputs,⁶ both in DCs and LDCs.

Migration is beneficial, but for whom?

SML is an essential and irreplaceable input for supplying modern products and sustainable economic growth and development in all nations. A relevant and crucial issue to consider is the willingness of SML in LDCs, especially at a young age, to migrate to DCs. This tendency can stem from a multitude of reasons, including political, cultural, and other motivations.

Regarding the migration issue, the approach of DCs to migration from SML is of paramount importance from a global perspective. In principle, DCs have a tradition to prevent the mobility of low-SML from LDCs. However, DCs that strongly object to the mobility of low-skilled people radically change their standpoint when the issue is the migration of skilled, especially highly skilled, people from LDCs. They swiftly alter their restrictions and build exceptionally accommodating paths for the migration of SML with potential suitable to their interests.

Cost of Improving Skills in LDCs⁷

Having re-emphasized the essential role of SML for the supply of modern products, let us now assess the cost of raising SML endowed with contemporary knowledge and experience. Investing in knowledge implies the need for substantial financial resources. In addition to time starting from the pre-school period, investments are made approximately 18–22 years until university education is completed. During that time, individuals are, generally, just consumers. Though the process of education is financially quite costly, requiring scarce resources, LDCs have no choice but to allocate large resources for education to bridge the gap in income levels between them. Every investment made to improve the skills of people is of vital importance. Otherwise, it is impossible to catch up with DCs.

Table-6 shows the expenditure on education as a percentage of total expenditure in selected countries. Zimbabwe tops the list by 30 percent.

⁶ By focusing only on knowledge, we overlook all the "institutional and infrastructural deficiencies" along with "technological market imperfections", which are also indispensable factors to make the analysis simple.

⁷ This section is quoted from H. Gürak's "virtual book" entitled "Mental Labor", Ch. 6

Table-6 Government expenditure on education as % of total government expenditure
Selected countries

Nepal	2015	% 15
Côte d'Ivoire	2014	% 21
Zimbabwe	2014	% 30
Guinea	2014	% 12
Viet Nam	2013	% 20
Senegal	2014	% 21
Lao PDR	2014	% 13
Uganda	2014	& 12

Source: UNESCO, 2016, Figure.4, p.4

According to Table-7, the education cost per student at the undergraduate level was \$ 3,428 in Türkiye in the 2003-2004 season while the corresponding cost was \$ 5,801 in India (see Table-8), and \$15,000 – 25,000 in the USA (see Table-9).

Table-7 Education cost in Turkey (\$) 2003-2004

	Cost per Student
Bachelors' degree	3,428

Source: DIE, Turkey's Statistical Yearbook-2004

Table-8 Education cost in India

Education level	Typical age group	Total education cost
University (undergraduate)	18-21 years	\$ 5,801

Source: Figures at purchasing power parity in constant 2009 dollars);
in: Winthrop, R., et al. 2013;26; Table-1.

Table-9 Average cost of education in the USA

Bachelor's level	\$ 15,000 - 25,000
Masters' level	\$ 15,000 – 50,000

Source: <http://prosperoverseas.com/cost-of-education>, 2017-06-01

Table-10 shows the macro-estimated returns to one additional year of education according to various researchers' estimates. Different researchers reach different results, but one thing is beyond doubt: investing in education always produces positive returns, showing that there is a close correlation between education and its macroeconomic returns.

Table-10 Macro-estimated returns to one additional year of education

Effect	Source
Each additional year of education is associated with about 30 % higher GDP per capita	Heckman and Klenow (1997)
A one-year increase of years of education is associated with 0.30 % per year faster growth	Bills and Klenow (2000)
Macro-estimated rate of return to education between 18 % and 30 %t	Krueger and Lindahl (2001)
A one-year increase in average education raises per capita income between 3 & and 6 %	Bassanini and Scarpetta (2001)
A one-year increase in the mean years of education is associated with a rise in per capita income by 3%-6%, or a higher growth rate of one percentage point	Sianesi and Van Reenen (2003)
No evidence of wide social returns to education based on cross-country regressions	Pritchett (2006)
Macro-estimated rate of return to education is 27 %	de la Fuente and Doménech (2006)
A one-year increase in years of education is associated with an additional 0.2 percentage point in GDP per capita annual growth (in real terms)	Borossard and Foko (2006)
Macro-estimated rate of return to education is between 9 % and 12.3 %	Cohen and Soto (2007)
Macro returns to years of education is 36.9 %, or each year of education is statistically significantly associated with a long run growth rate that is 0.58 percentage points higher	Hanushek and Woessmann (2008)
Controlling for physical capital stock, the rate return to the average year of education is 12.1 %	Barro and Lee (2010)
Each additional year of education is associated with 18 % higher GDP per capita	Crespo Cuaresma, Lutz and Sanderson (2012)
Each additional year of education is associated with 13 % higher GDP per capita	Thomas and Burnett (2013)
Each additional year of education is associated with 35 % higher GDP per capita	Patrinos and Psacharopoulos (2013)

Source: UNICEF, 2015 '*Education and Equity*', p.7; Table-1.

The following question is quite critical: What can DCs do to contribute to the development efforts of LDCs in terms of improving SML? Unfortunately, DCs, far from supporting LDCs, implement migration policies that harm them with their very selfish migration policies.

Can migration of SML be stopped?

Yes, migration can be stopped to a large extent through appropriate measures introduced and implemented by both decision-makers in DCs and LDCs.

The first-best and optimal policy for LDCs would be to retain skilled individuals in their home country, where they were born, raised, and educated. Even if it means accepting a lower income due to specific conditions prevailing in their countries, their priority should be the development of their home country. SML in LDCs acquire their skills financed by the scarce resources of their country, and just because of this fact, they owe to their people and country. After all, the future of LDCs depends on their contributions.

Yet, we frequently observe that SMLs seek every opportunity to migrate, mainly on economic grounds, and to have a higher standard of living for themselves. This is an unfortunate fact. As long as DCs warmly embrace SMLs most conducive to their interests, coupled with the eagerness of individuals in LDCs to achieve higher living standards swiftly, complete prevention of migration appears challenging. Given the global circumstances of today, forcing SM laborers to stay at home does not appear to be an effective measure to curb the migration of SM laborers.

How can LDCs economies catch up with DCs if this trend persists?

Is it fair and rational, from a global perspective, to disregard the problems arising from the migration of SM laborers, which clearly harms LDCs?⁸

The second-best policy would be that DCs help LDCs strengthen the skills and size of the labor force.

⁸ It is important to note that this analysis does not encompass temporary student or scientist exchanges, and instances of migration driven by factors such as marriage, political persecution, or cultural reasons lie beyond the scope of this study.

A proposal for global benefit

DCs, such as Germany, France, and Britain, can alleviate the SML drain by enhancing vocational training and higher education within LDCs while continuing the exploitation of them. This can be achieved through financial, organizational, and teaching support to improve their education and training infrastructure. DCs indeed possess the required human and non-human resources to contribute to making the world a better place for all countries and their residents.

Naturally, some SM laborers endowed with contemporary knowledge provided by DC resources would still have a strong tendency to seek opportunities to migrate. But some, willingly or unwillingly, would stay in their home country, and contribute to the development of the domestic economy with qualifications provided by DCs. Those who remain in their home countries are highly likely to get higher-paying jobs, compared to average wages, offered by foreign direct investors establishing production units in LDCs.

All countries, whether developed or less developed, are likely to benefit from the increased supply of SML endowed with contemporary skills provided by DCs.

Would it be enough if the migration of SM laborers stopped?

Let's assume that by the measures implemented, brain-drain from LDCs to DCs was stopped. Would it be sufficient to catch up with DCs in terms of income and development? Certainly not!

DCs are generally those countries that create new products through technological innovations owing to their advanced stage of development, including human resources capable of effectively harnessing existing and emerging technologies.

LDCs, on the other hand, can be defined as countries that implement existing technologies rather than creating new ones. This means that the biggest requirement for **LDCs** is not **CML** that creates new technologies, but **SML** that uses existing technologies effectively.

Let's assume that new migration measures were initiated in favor of **LDCs** and prevented the outflow of SML. Would all barriers to growth and development in **LDCs** be removed, paving the way for income convergence? In other words, would it be enough to ensure continued growth and development in LDCs and usher in "rosy days"?

Unfortunately, the answer to this critical question is no.

Prevention of the migration of SM laborers would be the most significant positive change in the right direction. Most LDCs lack ‘globally competitive firms and products’. In addition, LDCs, in general, lack the necessary technological, financial, political, and cultural infrastructure and institutions.

Last but definitely not least, LDC decision-makers do their utmost to bring into their countries foreign direct investments (FDIs). However, due to “**global technology market imperfections,**” FDIs are not rose gardens without thorns. If not always, the disadvantages of FDIs often outweigh the advantages. (See **H. Gürak, Hidden Costs of Technology Transfer**)

Reversing “Brain Drain”

There is a considerable gap between LDCs and DCs, and this gap is not easy to close. LDCs urgently require SML to increase productivity and incomes. Improved and extended education and training are the right measures for long-term targets, but it takes time to educate and train. There is, however, a potential remedy : a reversed brain drains of skilled migrants.

1-a: Reversing the brain drain of migrants to ‘home’ countries⁹

There is a great potential for qualified human resources that LDCs can utilize in the short term: the qualified migrants living in DCs. If these people can be encouraged to return home to the emigrated country, they can make a significant contribution to the development of LDC economy with the knowledge and experience acquired in DCs. With proper assistance and guidance from an institutional infrastructure, this process of reversed brain drain can produce valuable results.

Addressing patriotic and cultural emotions or providing financial incentives can be useful in reversing the brain drain. But it would not be sufficient. There are many ‘other’ issues to be properly dealt with first. One of them is the ill-defined duties and responsibilities. Another is the physical facilities at the workplace. The sardonic attitude of colleagues towards the person or the job done can also be a serious problem. Unless properly tackled, these kinds of issues can make the migrant decide to leave. Therefore, the expectations of the home-coming migrants and the working conditions offered should be carefully studied. In other words, if appropriate

⁹ Quoted from H. Gürak’s book entitled “**Economic Growth and Development-2**”, 2018, p.90-92

measures are not taken, the great potential benefits expected from reversed brain drain can produce undesired results.

1-b: Brain-drain: Migration from DCs to LDCs

The idea of the migration of DC citizens to LDCs might seem like an optimistic expectation at first. However, a ‘temporary’ migration policy through appropriate institutions can easily be implemented. As a matter of fact, there are some highly educated volunteers already working in LDCs, organized by international and/or national institutions. Although ‘temporary’, they have the potential to make a considerable contribution to the development of the local economy and the country. The contributions of the voluntary but temporary migrants can easily be extended to cover all areas of development.

For some, foreign direct investments (FDIs) in LDCs contribute to a brain drain into LDCs. The idea is that an FDI not only brings physical and financial inputs for production into the recipient country but also highly trained technical and administrative personnel, usually for a specific period. It is true that ‘those qualified migrants’ bring only their valuable knowledge and experience to the recipient country. But the relevant and critical question is: How much of this knowledge, especially knowledge on production (e.g., technology), is being transferred to the recipient country?

The evidence indicates that a ‘non-transfer’ of technology seems to be occurring rather than an ‘actual transfer’ of technology (see Gürak, 2012, 2015).

The potential for brain drains through foreign direct investment (FDI) seems highly exaggerated. In contrast to optimistic expectations, foreign subsidiary firms can easily serve as institutions, attracting highly qualified native personnel to work for them (brain drain). The people employed by foreign firms are expected to have only one mission: to serve the interests of the foreign owner. Any deviation from this mission, say, giving precedence to national economic interests, would not be welcome, to say the least.

1-c: Brain drains of ‘senior citizens’¹⁰

As life expectancy increases, the number of retired people increases accordingly, implying that more and more highly educated and well-qualified people with experience are leaving the active labor force of DCs. We will refer to them as ‘senior citizens’ who have the potential to carry

¹⁰ Skilled but retired or presently inactive in the labor market

out active work. If the right policies are designed and implemented, these senior citizens with precious qualifications can still make a giant contribution to the development of LDCs as part-time, full-time, temporary, or permanent personnel. Such policies would serve the interests of LDCs and make these people feel that they can still be effective.

There are already some non-profit institutions established with the purpose of helping the seniors' brain drain. One of them is the "International Executive Service Corps' (IESC), founded in 1964. LDCs should not hesitate to design migration policies to benefit from such an immense human resource. But if the senior citizens continue their organic ties with their home country institutions with the purpose of serving their own national interests, the presumed benefits would be limited, and the effect would be detrimental to LDC economies. Therefore, it seems wiser and more logical that LDCs found their institutions to maximize their gains and avoid any future conflicts of interest.

Concluding remarks

The subject of this article was SML migration from LDCs to DCs and its effects on respective economies.

When examining the perspectives of Western decision-makers and researchers on the migration process, the initial impression often leans towards acknowledging the significant benefits the brain drain has brought to LDCs. The migration process appears to unfold as a success story, as it not only diminishes unemployment rates but also results in the substantial accrual of foreign currency through remittances, a valuable resource that is often scarce.

On the other hand, DCs are also contended because, through migration, they get what they highly need, SML, at no cost of raising, educating, or training. In the absence of SML migration, their economies would be vulnerable to global competition, and the "welfare state" would not be able to supply some services. In addition, migrants also play a role in enriching culture on a broader scale..

As long as the personal aspirations of SM laborers in LDCs continues for a better living condition in richer countries, preventing migration completely cannot be achieved. On the other side, as long as the self-serving interests of DCs persist in seeking SML migrants, they are likely to maintain an open-door policy for SML from LDCs, often at the expense of zero-cost education and training.

The inescapable consequence of these realities implies an ongoing depletion of the most valuable assets – namely, Skilled Mental Labor (SML) – to the detriment of LDCs. What could be more beneficial for DCs while harming the development efforts of LDCs?

Looking for a better living conditions through migration is an understandable but selfish attitude. The SM laborers of LDCs owes their status to the country that has raised and educated them. Therefore, they should feel obliged to contribute to the society that has nurtured them.

Decision-makers in DCs are well aware of the importance of SM laborers to preserve their welfare state and the global competitiveness of firms. So, the migration of SM laborers from LDCs is a kind of “gift from heaven” for them at zero cost.

- Do decision-makers in DCs comprehend global issues arising from the migration of SM laborers from LDCs?
- Do they genuinely prioritize current and future global issues?
- Do they ever sincerely attempt to empathize with LDCs?
- Do decision-makers in DCs think that their people, by birth or any other criteria, deserve a higher and better standard of living than those in LDCs?

Unfortunately, decision-makers in DCs seem to pay only lip service to global issues. LDCs lose their most valuable assets, and DCs just look the other way, pretending not to see the related problems. The situation has persisted until now, but it cannot be sustained in the future; it ought not to.

It is an undeniable fact that DCs need SML. However, LDCs also need SML. The requirement for SML in LDCs is far greater and more urgent than the requirement for DCs.

DCs should cease exploiting the most valuable assets of LDCs, namely SML. Instead, they should explore ways to assist LDCs in advancing their domestic economies through altruistic policies.

Appendix-1

Quoted from H. Gürak's book entitled "Economic Growth and Development, 2015, pp. 147-149, PL Academic Publ. Frankfurt

"Productive" Factors & "Production" Factors

There were only two factors of production considered by the mainstream economic theories: viz. labor (L) and capital (K). Due to the developments in economic theories since the 1950s, two factors are now added to the original two: namely technological change, (A), and human capital (H). In this section of this work, the reader will be presented with a different approach to these issues which differs from those prevalent at this time. This approach claims that there are only "two productive factors" of production, but "many inputs or factors of production".

Productive¹¹ Factors

There are only two "productive" factors capable of producing use-and/or exchange-value as discussed in the Chapters 1 and 2.

1-**Laborer (L)** (physical as well as mental).

2-**Nature** (the entire ecological system)

Production Factors

In this section all required inputs of production are the factors or inputs of production. For instance, along with labor and capital goods, all raw-materials, the energy used, buildings, tools, in short, every item necessary for a required output are factors (inputs) of production. In contrast

¹¹ **Productive and unproductive labor** are concepts that were frequently used by classical economists. Productive laborer is described as the sort of labor which produces (surplus) value of the material subjects for capitalist. "As Marx says {Theories of Surplus Value, pt. I, Appendix on "Productive and Unproductive Labour"} The literary proletarian of Leipzig, who fabricates books . . . under the direction of his publisher, is a productive laborer) (Bottomore, T. 1991, p.6)

Consequently, the useful labor provided by, say, teachers, doctors, etc., is essentially unproductive if it fails to produce surplus value for the capitalist. But such services are critical to the economic performance of any country. Some services provided may not be as useful, such as security, cleaning, etc., but as complementary services, they can, directly or indirectly, produce surplus value for the capitalist. A philharmonic orchestra can perform even with only one violinist and still make a profit for the orchestra owner. But would the musical performance quality still be the same? Since we are analyzing a capitalist economy, throughout this book, entitled "Mental Activity," all types of labor, whether producing goods or services, are considered "productive" as long as they produce profits and contribute to total surplus value.

to the orthodox equilibrium theories, capital goods are not assumed to be productive; on the contrary, they are used to increase the productivity of the laborer employed in production. The common factors (inputs) of production are:

- Laborer.
- Raw-materials.
- Intermediaries (semi-finished goods).
- Energy inputs, water, etc.
- Capital goods (machinery, tools).
- Consultancy services.
- Post-production marketing and sale efforts.
- Transport-insurance.
- Management.
- And all other inputs required for the particular output.

Factors (inputs) of production can be subdivided into two broad groups:

- 1-Laborer (**L**).
- 2-Other inputs (**Xi**).

“Productive” Factors and Value-creation

There are only two “productive” factors, nature and labor. Nature is productive in the sense that it is capable of supplying products with “use-value” without any external intervention. These products range from directly consumable products such as vegetables and fruits to the basic inputs of production which in turn are transformed by labor. The productivity of the nature is strongly associated with environmental conditions. Nature, in modern societies generally, does not supply products, which are directly consumable. In order to be consumable contemporary products have to be “transformed” into “useful” products by some form of labor.

It is only after being processed by labor these supplies from nature are transformed into products with an “exchange-value”.

The labor-time spent could range, from a “simple” labor-time, say transporting the apples from a garden to the marketplace, to a more “complex” labor-time requiring higher qualifications in transforming nature’s products into semi-finished or finished products. For instance, the raw form of a chair is the tree, and it is transformed by labor into a useful product with an “exchange-

value”. It is a primary law of physics that nothing in nature disappears completely, and nothing is created without using some form of available input; natural supplies only change forms through labor. That is to say, nature supplies the basic inputs of all output and laborer converts them into the other forms demanded by the consumer. Assuming that the inputs of nature are a given, the source of all “exchange-value” is generated by the physical and mental inputs of laborers.

Following this line of reasoning, an attempt will be made below to construct a simple growth model based on labor and laborer. It will not be the aim of this simple model to give an exact account of actual complex economic relations. But, rather, it could be used as a precursor to pave the way for more realistic models in the future. The main purpose of the simple model is to show that the original source of all created exchange-value, technological innovation and long-run growth is laborer, or, more specifically, “*creative mental labor*” of the laborer. Therefore, the reader is asked to bear in mind the mental labor aspect of the model all times.

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