

Economic and Social Inferences of the Highly Skilled Labor Force Migration

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Abstract

Mobility and especially labor force migration represent in contemporary society an economic and social factor of “modeling” the economic environment within the local communities where they act. Not only do they ensure the attenuation/elimination (even temporary) of some acute dysfunctions on the labor market, but they allow also for a better evaluation of the labor potential, competencies and personal skills of migrants. And, when these are highly skilled persons, when we face brain drain, brain gain and brain exchange processes, the economic and social outcomes, but also the cultural and human development ones are far more complex and trigger combined and multiplicative effects on medium- and long-term. Highly skilled labor force (temporary) migration is determined by a variety of factors, starting with the economic, demographic and social ones, in general, to the personal ones of professional fulfillment and human development. In addition to this, the interdependencies between labor force migration and structural employment adjustment are intensified – economic growth turns more intense.

Key words: labor force, migration, employment

Highly Skilled Labor Force Mobility/Migration

“Brain” migration is currently the most valuable form of people mobility. By the potentially added value of these highly skilled, specialized, performing and innovative persons “knowledge and innovation” becomes today the “engine of sustainable development” (Figel 2005) [4]. Attracting and keeping the performing labor force on the national market represents a condition of competitiveness, of ensuring sustainable development at local and national level.

Highly skilled population migration flows are determined/oriented as volume, intensity and movement directions by a sum of conditions, among which, as most important are underpinned the following:

- Gaps and lags between the skilled and the performing labor force as a potential supply from the system of initial education on geographic areas and development regions, and the local/regional/national labor market;
- differences with respect to the professional profile supplied through the education systems and the demand of the economic environment, or of the research-development sector;
- the financial capacity and the policy of attracting skilled personnel promoted by certain state-owned or private institutions and companies;

- personal development opportunities (building a career, financial standard, social position, etc.);
- attractiveness of the national social services system offered to the labor force as counterbalance for the system of compulsory contributions and labor incomes taxation;

It is worth mentioning that brain drain flows are the result, mainly, of several factors' accrual – push and pull factors, and migration flows are oriented on few movement axes: from South to North, from East to West, from Europe to USA or Japan. New routes of brain migration are built up, respectively those from Africa and Asia to Europe and USA.

The deficit of highly skilled human resources, triggered by a weak correlation between educational supply and the demand imposed by competencies and qualifications of the economic environment is becoming more and more obvious, especially in the European area, in the countries that traditionally attracted and retained performing labor force. In the last years, adjustment/completion policies for performing labor force potential have been intensified, developed and nuanced by attracting to the lacking labor market segments, and especially in the RDI area the highly skilled and/or in training migrant population that proved certain skills and competencies in the field of cutting-edge sciences.

The level of satisfying the demand on labor market with highly skilled labor force is sensibly higher in destination areas of brain flows, which is of performing, competent and highly innovative personnel. While Europe is certainly a highly educated society, only 21% from the working age population of EU have graduated from a higher education institution, whereas in the USA the share is sensibly higher, 38%, same as in Canada (43%), Japan (36%) or South Korea (26%) [10].

With respect to students' mobility, as a potential source of brain drain feeding, we should notice that the flows develop along the same axes as labor force migration. The EU area, for instance, attracts about 400 thousands students, from whom 60% have origins in other countries than the member ones. The net balance (outgoing students – incoming student) is in the favor of entries with 60 thousands persons (school year 2001/02), whereas in Romania's case the balance is negative, for the same period the losses being of about 10 thousands persons (12.5 thousands students left and only 2.6 thousands foreign students entered the country) [11]. Even if EU is a net receiver of foreign students, it has an ever-lower capacity of attracting and retaining youth with special potential (talented minds).

In accordance with the Kok Report, the administrative and legislative barriers represent the most significant restrictive factors for highly skilled labor force mobility [8]. The interest of EU-area countries for brain drain has been clearly defined by the ministries of education of EU member countries that drafted a special program therefore (Detailed Work Programme) having as purpose to change the EU area into “the most advantageous destination for students, pupils and researchers from other regions of the world”.

Factors Aimed at Adjusting the Mobility of the Highly Skilled Population

Brain migration represents a more and more intense process that comprises larger categories of population. In the nineties, there was recorded a significant growth of international mobility of highly skilled workers, who were in search of workplaces in the fields of new technologies, education and health insurance [13]. Nowadays, attracting the most performing to work in companies, institutions, research centers, etc, other than in the origin area is done even at earlier stages, starting already with lower secondary education. The best students are encouraged by various methods to attain performance. They even receive an induced behavior in order to ‘specialize and subsequently build up an exceptional career’. Through opportunities of pursuing

studies or specialization in prestigious education centers of the world, or in acknowledged research-development institutes of the scientific community, the first step to brain drain is made.

Attracting overqualified persons with finished education that are already active on the labor market or are searching for a workplace “corresponding to training” is achieved mainly by means of two ways:

- brain shopping, when labor conditions and incomes are negotiated;
- stimulating the participation to training/high specialization courses and thereafter the attraction to and employment on labor market, as a rule outside the origin country/region.

Brain drain, unlike labor migration aims at an uncertain defined time horizon. The labor relation is based on a contract for a longer period (well-stipulated in time, or not, but indisputably better remunerated) yet conditioned by achieving high performances. The employer will respect the contractual undertaking as long as there are replacement opportunities with another person, comparatively a more performing one and perhaps just as ‘expensive’, or a person for whom, potentially, a better ratio cost-performances/results is ensured.

Factors determining migratory behaviors are different concerning age groups and they depend each individual’s position:

- *for young pupils/students* migration is determined by:
 - the wish to continue their studies and specialization in the best education/research entities;
 - eagerness to compare with pupils/students from other countries;
 - the opportunity to ensure after finishing education a workplace corresponding to training and that would allow the development of a career of excellence;
- *for those already entered/active on labor market*, respectively for working age population, the driving/incentive factors for migration are established by:
 - the wish for professional accomplishment, which cannot be materialized at the current workplace;
 - the expectation for financial security/comfort, in accordance with performances and social position.

Essentially, there have been identified three groups of factors triggering migration [13]:

- the economic attractiveness of destination regions (the economic potential of interest to migrants);
- the presence of family members (the possibility of migrating with the family) and/or the existence of some communities of same ethnic origin as the migrant person;
- permissiveness on crossing the border and/or distance between the origin and destination country.

In order to strengthen brain mobility, host countries punctually provide, accrued economic and/or social advantages for the migrant and his family.

If labor migration has as concrete objectives the temporary covering of employment deficits on well-defined market segments, brain drain represents a permanent recruiting action of over-endowed persons, irrespective of the specialization field.

Brain drain is both the cause and the effect of the incorporation of technological advancement and the promotion of ITC technologies. Brain migration flows are stimulated by:

- the new requirements of employers with respect to employment in the sense of permanently renewing the qualitative labor force demand in correlation with the technological level of intangible assets, with the modern methods of production and labor organization, including the ones triggered by ITC. The greatest challenge of today’s employers is to create an organization/company apt to attract and retain talented persons (Pink 1997) [5];
- the permanent change of labor place requirements diminishes the importance of stability, experience and competence at the workplace if it is not combined with continuous education having as purpose the adjustment/updating of the labor environment. Permanent

employment is closely related to lifelong learning associated with continuous development of labor skills and competencies that would support/enhance career advancement, performance and mobility. More than ever, today's employees must have an entrepreneurial behavior – they must act as free agents, to advertise their own labor capacity which should be offered to employers – who are the “customers” (Brown 1998) [1];

- gaining professional satisfaction and fulfillment associated with ensuring a certain financial safety/comfort [3].
- mutual acknowledgment of professional qualifications and adjustment of school curriculum to EU requirements in the field and ensuring the required knowledge for the field in demand on the EU labor market by introducing special courses for graduates. Improvement within the institutional framework (diploma certification and validation centers – at the Ministry of Education, the Ministry of Health, the Office for Labor Migration, etc.).
- The possibility to transfer benefits from social insurances, that is, to increase current (by health insurance) and future (by old-age insurance – pensions) safety. At EU level, for instance, an opening is shown to this end as “the last 30 years of legislative framework build up in the field of social security have lead to more permissive access rules for migrant workers who are active in another country than the country of origin. This mobility has generated the introduction of the European health insurance card by means of which access procedures to health services are simplified for persons finding themselves outside the borders of the country of origin...2006 is the year of promoting workers' mobility in Europe” [12].
- Ensuring easier access to labor force demand at international level by organizing international job fairs in Romania, as well as by developing regional employment services. Labor force mobility is no longer regarded just as “one of mankind's fundamental liberties...it is a necessary device for economic adjustment”, a fact that determined at European level, for instance “strengthening/building up the European network of employment services” which promote persons' mobility for those who wish to work [7].

Brain Drain, Brain Gain and Brain Exchange. Dimensions and Characteristics

Even if the total migration rate in Romania, as compared to other countries is relatively lower (approximately about half), the structure on ages and professional training and employment level is significant. As a general remark, it is initiated by with highly skilled professional training and outstanding performances young persons.

Legal and illegal migrant population is largely represented by young persons:

- Finding themselves in various training stages (about 1/5 from the total);
- with age between 18 and 40, with high creative-productive capacity. This working age population group represents about 40% from the migrant population (with a migration rate during the transition period of 1.5 – 5‰) and quasi-totally as labor migration.

From the total migrant population, the graduates of higher education (ISCED 5-7), assimilated with brain drain, represent about 10% from total migrant persons, a superior proportion to the share of this group in total population aged 15 to 60, which reflects the propensity to migration of this labor force category. They leave because they “cannot find their place”, respectively an ‘adequate and attractive’ job.

The graduates of upper-secondary education also present high migration potential (with great chances to shift to emigration). More than a third of emigrants are graduates of secondary education (ISCED 3G and ISCED 3V) and post-secondary education (ISCED 4), but the mentioned share is lower than their share in total population aged 15 to 60 (about 1/3).

A special significance has the professional-occupational and educational structure of migrant persons. Incomplete statistic information, that are not updated/adjusted to present hardly offer any details about the most dynamic professional-occupational segments (hard- and software developers, telecommunication engineers, paramedical personnel, etc.). The dynamics of the emigrants' distribution on selected professional categories (statistically recorded) highlight an occupational-professional and educational polarization with the most numerous emigrants from the category of engineers and architects (6%, data from 1990-2000), followed by teachers, technicians and foremen (about 1/3 from the previous category), then by economists, physicians and pharmacists.

The graduates of higher education emigrating from Romania are opting with predilection for destinations including the most developed countries: Canada, USA, Germany, while those entering the country are mainly from Moldavia.

Whether we position ourselves at economic, financial or cultural level, the net balance of "brain mobility" disadvantages the origin country and is to the benefit of the destination country and of the migrant person [6].

A brief presentation of the advantages/disadvantages for the origin country takes into account the following aspects:

- main losses refer to
 - the risk of accruing on long term an increasing deficit of competencies and skills, especially with respect to the ones related to new technologies, and to specific top fields of science. Exit flows and arrival flows represent only to a small extent an option and, as a rule, immigration to transition or less developed countries is on a lower rate than emigration. Labor force exchange under its qualitative aspect is inferior, even under the conditions in which the numerical ratio is 'favorable' to brain gain flows.
 - effects of attracting and using high professional competencies. On a long term, if entries on labor market for persons having competencies that satisfy the local demand is realized mainly due to migration, then it might come to decreased investments' interest at local level for primary and continuous education. Using competency import instead of some local education and vocational training policies does not represent an alternative, not even on short term. Permanent investments in human resources through training prove for the present and future to be the most profitable policy of stimulating competitiveness.
 - highly skilled labor force mobility, either temporary or permanent, triggers the competencies, skills and working habits exchange. The net balance of these exchanges tends to a favorable ratio at a local level and on labor market segments for the origin country, and for the destination country as well.
 - the dependencies created by the level of the expected income from labor, work life quality and career development opportunities generate negative effects on the 'net exporting market' at least on two channels: on the one hand, due to the incapacity of the market to employ highly skilled persons, and on the other hand by displacing the already employed labor force (that leaves) and the incapacity to reoccupy these jobs under comparable conditions, at least;
 - highly skilled labor force exchange leads also to professional-occupational de-structuring hence determining pressures on narrow market segments – penury/deficit for some trades and professions and over-supply, and implicitly long-term unemployment for others:
- advantages, respectively gains are few and rather volatile
 - the labor market is depressurized and possibly, unemployment diminishes but this does not compensate for the expenditures made by the society for the education of the migrant person;
 - remittances from working abroad are limited, as a rule accidental in event of brain migration and if migration becomes permanent, these, again as a rule, vanish.

- gains at the level of labor culture or at the one of the value added in the case of remittances are relatively lower than the ones generated in the country of immigration.

Through brain gain the problems of labor force deficit are resolved on narrow market segments, but in the case of the highly skilled labor force the same inefficiency issues emerge with respect to employment due to the lack of financial resources for endowments with performing research equipment and stimulating remuneration.

In addition to this, brain import on an insufficiently developed market might lead to temporary/transitory employment (towards more attractive regions) or even to social tensions – unemployment, non-adjustment, etc.

Skilled Labor Force Exchange. Multiple Implications, Lasting Effects

Brain mobility, no matter if temporary or permanent, attracts a sum of positive and negative effects.

Brain drain is not a theoretical or purely academic issue. Billions of Euros are required and tens of thousands of jobs change because science development triggers unprecedented economic growth in ITC and biotechnological fields, and in the pharmaceutical sector. Europe cannot afford to be left behind...If we have the ability to keep up the pace among the most innovative at world level, we shall be able to increase the level of prosperity as to allow for the maintaining of the living standard in this permanently changing society [2]. Romania faces higher reasons of concern are for because economic restructuring in order to generate performance and competitiveness on medium-term cannot be achieved but by incorporating technological advancement and employment of highly competent human resources, and this cannot be achieved through net losses of skilled labor force due to temporary or permanent migration.

For as long as the economic and social environment cannot support a performing education system and ensure employment of highly skilled experts, the brain drain circulation processes shall continue, even intensify. But more than brain migration, entrepreneurship drain (the entrepreneurial management of the highly skilled human potential) represents the most important factor that might affect on a long-term the innovative capacity and adjust the competitive development of local companies in high-tech fields, as well as job creation for young scientific researchers [9].

In order to counteract the negative effects of brain circulation, efforts in a transition country are much more significant. The situation in Romania, a series of initiatives focusing on:

- “reconciliation” between labor and education market, achieving a functional connection between them for increasing the absorption capacity of graduates on labor market;
- initiatives and concrete measures of concluding permanent contracts, of cooperation between Romanian specialists who remained in the country and those who migrated (either permanently or temporary), including incentives for their return to the country and, implicitly, on the labor market;
- developing some strategies for importing ‘brain gain’ through active measures of at least replacement immigration – covering the competencies’ deficit due to national labor force emigration by selective recruitment from abroad, granting incentives for the return of talented persons and young Romanians who were educated/trained abroad, building up recruitment networks for labor force, implicitly for brain gain, etc. Aggressive recruitment policies promoted to cover highly skilled labor force deficits from North America and Europe trigger competencies and skills’ deficit on labor markets in the origin regions of the labor force and these losses are not always acceptable. In many cases, even if these ease down the tension of the local market on a short-term, they obstruct the maintenance of

- medium- and long-term balances, and slow economic growth, as well as implicitly diminishing competitiveness, and on long-term quality and life standard of the community;
- attracting funds for research development and financing some performing technologies assimilation projects for the current and future competence fields of the Romanian economy. Financing was and remains the main restriction in creating stimulating jobs for highly skilled labor force, in generating conditions for incentives and development of performing education and research;
 - development of a 'performance culture' based on bonuses and ensuring career advancement for most competent and performing persons;
 - stimulating international cooperation through education (continuous, specialization) and research networks;
 - promoting a scholarship system for abroad specialization in top fields of the science for those segments of competencies and skills required for present and future development of the local and national economy.

If migration management as globalization phenomenon has turned out as necessity at national, regional and international level, the management of brain migration represents an imperative of employment policies at national level especially for developing countries that are less attractive due to the diminished opportunities they offer to the most performing labor force categories.

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Interferențe economice și sociale ale migrării forței de muncă înalt calificate

Rezumat

Mobilitatea, și în special migrarea forței de muncă reprezintă, în societatea contemporană, un factor economic și social de „modelare” a mediului economic în contextul comunităților locale. Procesul nu numai că asigură atenuarea/eliminarea (chiar temporară) a unor disfuncționalități acute pe piața muncii, ci, în plus, permite valorificarea superioară a potențialului de muncă, a competențelor și abilităților personale ale celor care migrează. Atunci când acestea sunt înalt calificate, când avem de-a face cu procese de „brain drain”, „brain gain” și „brain exchange”, rezultatele economice și sociale, precum și dezvoltarea culturală și umană devin mult mai complexe și antrenează efecte combinate și de multiplicare pe termen mediu și lung. Migrația (temporară) a forței de muncă înalt calificate este determinată de o varietate de factori generali (economici, demografici, sociali), dar și personali (împlinirea profesională, dezvoltarea umană). În plus, interdependențele dintre migrația forței de muncă și evoluția gradului de ocupare din punct de vedere structural sunt intensificate ca urmare a creșterii economice.