

# EMPIRICAL REFLECTIONS ON MIGRATION PHENOMENON. MAJOR EFFECTS OF MIGRATION ON THE HUMAN CAPITAL

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## **Abstract:**

*The paper **Empirical reflections on migration phenomenon. Major effects of migration on the human capital** analyzes the migration flows of the workforce (as part of the human capital) globally/regionally, especially the highly qualified workforce migration. The qualified manpower processes of attracting on the work market have not been always well understood and, in some cases, have generated a series of difficulties. This is the reason why we will focus on the „waste of brains” phenomenon, which appears when highly qualified individuals are neither employed in the source-country nor in the target country; and, if they are, their job is below their qualifications.*

**Key words:** migration, migrants’ productivity, remittances, brain-drain, human capital

**JEL classification:** O15, R23

## **1. INTRODUCTION**

Migration is a phenomenon which affects the formation and accumulation of human capital, especially the migration of highly qualified workforce from poor countries to the developed ones. It affects the process of human capital formation, in several ways:

- The *brain-drain* has a negative effect and depends on the „brains” share of the migrants total; still, in this case, we can talk about an „optimal brain drain”, which manifests itself when education is seen as a „passport” towards emigration; thus, the emigration possibility stimulates the students from the *source-country*, to follow academic studies; therefore, the brain-drain may be thought of as a strategy which follows the education and „export” of highly qualified workers in order to attract economic benefits [Vodă I., Domnita L., 2007];

- The increase of migrants’ productivity, migrants who came back based on their experience abroad; in this case, the migrant is an agent of technologies international transfer and depends on the probability of his coming back to the country (in this case, we talk about „brain movement”);

- The use of remittances as a source of study funding (especially higher education studies); it depends on the country’s education system quality (since education, for which the remittances are spent, do not offer relevant knowledge, the final effect upon the productive human capital is negligibly smaller).

## **2. SHORT ANALYSIS OF THE MIGRATIONAL PHENOMENON**

Without a doubt, the increase of the highly qualified workforce migration is one of the main characteristics of international migration, especially in developed countries; thus, a lot of these countries have adopted measures in order to facilitate recruiting of highly qualified workforce (for example, granting of fiscal incentives, a.o.). This tendency will manifest itself also in the future, as a result of the current demographic changes.

Currently, the immigrants stock is of 215,8 million people or 3,2% of the population; women, as percent of the immigrants, represent 48,4% [World Bank, UNDP, 2011]. The main „receptor” - countries („host”), globally, for the emigrants are: USA, The Russian Federation,

Germany, Saudi Arabia, Canada, Great Britain, Spain, France, Australia, India (see table no 1.1) while the „source” ones (which the population migrate from) are: Mexico, India, The Russian Federation, China, Ukraine, Bangladesh, Pakistan, Great Britain, The Philippines, Turkey (see table 1.1).

Table no 1.1

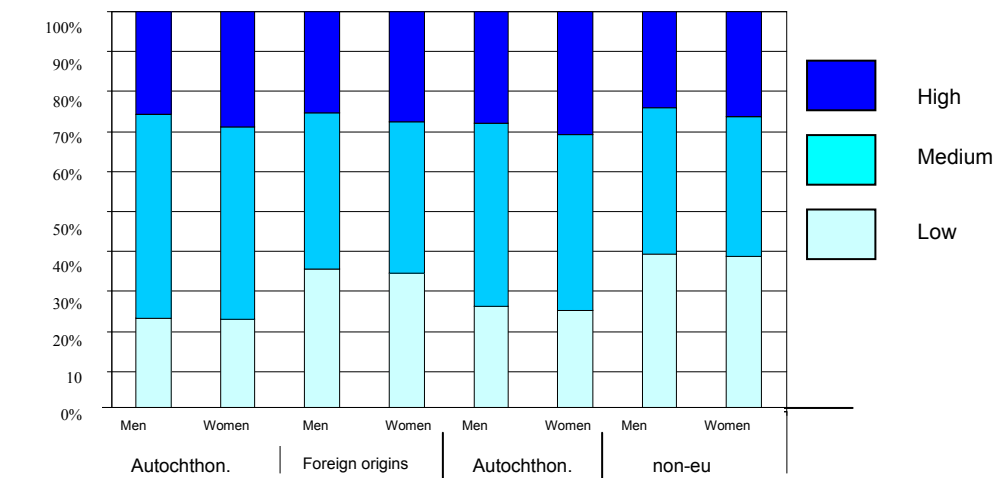
**The top of countries in/from which people emigrate,  
(no of immigrants, millions)**

RECEIVER COUNTRIES	NO OF IMMIGRANTS IN 2010	„SOURCE” COUNTRIES	NO OF EMIGRANTS IN 2010
USA	42,8	MEXICO	11,9
RUSSIAN FEDERATION	12,3	INDIA	11,4
GERMANY	10,8	THE RUSSIAN FEDERATION	11,1
SAUDI ARABIA	7,3	CHINA	8,3
CANADA	7,2	UKRAINE	6,6
GREAT BRITAIN	7	BANGLADESH	5,4
SPAIN	6,9	PAKISTAN	4,7
FRANCE	6,7	GREAT BRITAIN	4,7
AUSTRALIA	5,5	THE PHILIPPINES	4,3
INDIA	5,4	TURKEY	4,3
UKRAINE	5,3	EGYPT	3,7
ITALY	4,5	KAZAKHSTAN	3,7
PAKISTAN	4,2	GERMANY	3,5
THE I.E.	3,3	ITALY	3,5
KAZAKHSTAN	3,1	POLAND	3,1
JORDAN	3	MOROCCO	3
ISRAEL	2,9	GAZA	3
HONG KONG	2,7	ROMANIA	2,8
THE IVORY COAST	2,4	INDONESIA	2,5
MALAYSIA	2,4	USA	2,4
SYRIA	2,2	AFGHANISTAN	2,3
JAPAN	2,2	PORTUGAL	2,2
IRAN	2,1	VIETNAM	2,2
KUWAIT	2,1	COLOMBIA	2,1
SINGAPORE	2	KOREA	2,1
SOUTH AFRICA	1,9	UZBEKISTAN	2
GHANA	1,9	SRI LANKA	1,8
SWITZERLAND	1,8	BELARUS	1,8
THE NETHERLANDS	1,8	FRANCE	1,7

Source: Migration and Remittances, Fact book, 2011; Development Prospects Group, World Bank; UNDO 2009

As for the migrants' training level, there is a total of 46,8 millions of low qualification level migrants (43.6%), 37.5 millions of medium qualification level migrants (35%) and 23 million highly qualified migrants (21.5%) (Dumont, J.C., Spielvogel G., Widmaier S., 2010). The great percent of 43.6% from the total, that is 46.8 million migrants, is explained in that the *majority* of the „receptor” countries hire *medium or low qualified* workers for „3Ds” type of professions (an exception being Japan) (1). Noticeable is the fact that the low qualification population's migration still prevails, in absolute terms; the low level of qualification of people who migrate is maintained both in the OECD member-countries, as in the non-member ones. At EU level, as one may notice in the figure 1, the same phenomenon is registered; the immigrants with ages between 25 and 54 years

have a lower level of education compared to the autochthonous population. In the European Union, the higher educated immigrants tend to be sub-represented (1% difference) and overly-represented to a greater extent by those with a lower level of education (12% difference).



Source: Eurostat, EU Labor Force Survey, Demography Report, 2010

**Figure 1. Educational level of the population with ages between 25-54 years, depending on the country of origin, 2009 (%)**

Still, the emigration rate of highly qualified people exceeds the total rate of emigration in all regions, something which reflects the migration's selective character. Also, one can notice that the emigration rate of people with higher education in Africa has reached, globally, the value of 10.6% (9.7% for the migration towards the OECD countries), while the global average is of 5.4% (4.3% in the OECD countries) (Dumont, J.C., Spielvogel G., Widmaier S., 2010) (the emigration rates per regions and categories will be analyzed later). In the EU, the share of higher educated immigrants and of those with lower education differ significantly within the member-states; the EU states do not seem to attract a great number of higher education immigrants, even if the share of highly educated immigrants is of more than 40% in some countries (Ireland, Bulgaria, Luxembourg, Estonia and Poland). Some countries have the tendency to attract low –educated immigrants, especially in Greece, Portugal, Malta, Italy, Spain and France, *a case in which over 40% of the immigrants have a lower level of education* (see table 2, we have previously spoke about the „3Ds” concepts) (European Commission, 2010).

Obviously, the process of attracting qualified immigrants on the labor force market has never been so well understood, and in some cases, has generated a series of difficulties. As one observed within the autochthonous population, immigrants (considered as people born abroad) with a higher education have managed to get on the *host-country* labor market easier than those with a lower education. Generally speaking, this is the case of the OECD member-countries, but in the other countries, the situation varies considerably. The discrepancies related to the labor force occupying rate and unemployment between the autochthonous population and immigrants tend to increase once with the education level. Thus, the structure of immigrants, on education levels, varies from one „host” country from another. As one can see in table 2, immigrants with higher education but also lower education studies, tend to become an important share, reaching a total of 46.8%.

**Table 2****Educational level of people with ages between 25-54 years, depending on the country of origin, 2009 (%)**

Countries	Autochthonous population			Foreign population			EU 27 autochthonous population			Non-EU		
	L	M	H	L	M	H	L	M	H	L	M	H
EU 27	23	49	27	35	38	26	26	45	29	39	36	25
Belgium	22	41	37	38	30	32	30	32	38	44	29	27
Bulgaria	19	57	24	*	(51)	(45)					(54)	(41)
Czech Republic	7	77	17	14	62	24	14	63	23	14	61	25
Denmark	20	42	37	28	37	35	13	37	51	32	37	31
Germany	9	63	28	*	*	*	*	*	*	*	*	*
Estonia	10	53	36	(4)	55	42		(47)	(52)	(4)	55	41
Ireland	25	38	37	16	34	50	19	37	44	10	26	64
Greece	31	43	27	49	37	14	28	52	20	54	33	13
Spain	44	21	35	43	34	23	30	39	31	48	32	20
France	22	45	32	41	31	28	39	34	28	41	30	29
Italy	40	43	16	43	44	12	31	57	12	50	38	13
Cyprus	20	42	38	25	38	37	16	45	39	32	33	35
Lithuania	13	60	28	7	68	25	(16)	61	23	6	68	26
Latvia	7	60	33	*	63	34	*	*	*	*	63	35
Luxembourg	18	53	29	25	30	45	25	30	46	24	34	41
Unary	17	62	21	13	55	32	13	59	27	(11)	44	45
Malta	68	17	15	53	(27)	(20)	(50)	*	*	55	28	
Holland	21	44	35	37	34	29	21	34	45	41	34	25
Austria	12	68	20	30	50	20	10	58	32	40	46	14
Poland	9	67	24	*	56	41					(59)	(40)
Portugal	68	16	16	49	30	21	40	31	29	51	29	19
Romania	<b>21</b>	<b>65</b>	<b>14</b>	*	*	*	*	*	*	*	*	*
Slovenia	12	61	27	32	57	11	*	64	(32)	35	56	9
Slovakia	7	76	17	*	68	23	*	68	22		68	
Finland	12	47	41	25	45	30	18	52	29	29	40	31
Sweden	12	53	35	29	36	36	19	39	42	32	35	34
Great Britain	24	41	35	20	44	36	15	53	32	21	41	38
Norway**	13	56	31	17	47	36	*	*	*	*	*	*
USA**	8	52	40	30	35	35	*	*	*	*	*	*
Canada**	23	38	39	22	32	46	*	*	*	*	*	*

(L-Low, M-Medium, H-High)

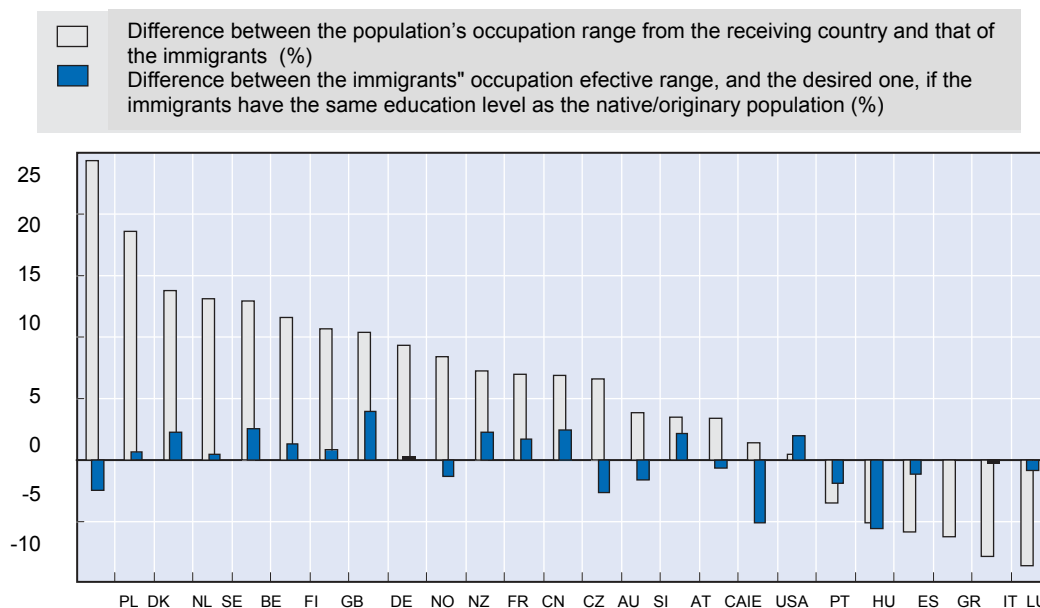
The number within the parentheses emphasizes the lack of reliability, due to the reduced dimension of the sample;

"\*" indicate whether there are no available data

\*\* The data has been taken over from International Migration Outlook, OECD

Source: Eurostat, EU Labor Force Survey, Demography Report, 2010

Except the south European countries (Portugal, Spain, Greece), Luxembourg and Hungary, where immigration is a recent phenomenon, the immigrants' employment rate is smaller than that of the autochthonous population from all other countries. The education level explains these differences only partially; exceptions to the rule are Austria and United States of America. In France, for example, even though the immigrants' educational level can be compared with that of the native people, a gap of over 60% in the workforce occupation rate is maintained (see figure 2); in Ireland the gap is even bigger. In Denmark, Germany and Finland, the gap exceeds 15%. As for the unemployment rate, the analysis performed by OECD confirms the same differences between natives and immigrants.



(PL– POLAND, DK – DENMARK, SE- SWEDEN, FI – FINLAND, GB- GREAT BRITAIN, DE-GERMANY, NO- NORWAY, NZ- NEW ZEALAND, FR-FRANCE, CN- CHINA, CZ- CZECH REPUBLIC, AU-AUSTRALIA, SL- SLOVAKIA, AT- AUSTRIA, CA- CANADA, EI-IRELAND, PT-PORTUGAL, HU-HUNGARY, SP-SPAIN, GR- GREECE, IT-ITALY, LU-LUXEMBOURG)

Source: \*\*\**International Migration Outlook*, OECD, 2007

**Figure 2. Differences in the share of occupation for the native population and immigrants**

Also, from the graphic 1.2 one may see that in France, the difference between the locals/local population occupying share is of 7,3%. In the case where an immigrant has followed the same education structure as the locals, the employment rate is by 2,3 % higher. In other words, 5%, that is more than two thirds from the difference, which cannot be explained directly by the differences given by qualification/training.

### 3. CONCLUSIONS

As a consequence, we can say that the immigrants deal with difficulties when it comes to using their knowledge on the labor market; we are talking about a *brain drain* phenomenon which appears when highly qualified individuals are neither employed in their source country, nor in the target country; and, if they are, their jobs is below their qualifications.

These difficulties can be attributed to: 2) the differences given by „value” of studies/diplomas or the intrinsic competences; (b) problems related to the acknowledgment of diplomas obtained in the country of origin; (c) lack of human and social capital specific to the host-country (for example, linguistic abilities/language knowledge); (d) workforce market local situation; and (e) the various forms of discrimination. Difficulties in the access of labor force on the market can also appear in case of „over-qualification”. This phenomenon appears when a person holds a job which needs lower qualifications and has a smaller remuneration than it would theoretically be accessible to people who have the same education level.

Also, we can talk about multiple influences upon the migrational flows of the workforce (as part of the human) globally/regionally:

- There are several global „tendencies” between the „poor” and the rich countries;
- There are numerous differences and disparities, aspects which are strictly specific per countries’ main groups (Western countries, such as USA, Canada etc.; Asian countries or recently industrialized; Japan’s unique case; the African countries etc.);

- Along with economic or financial aspects, the labor force emigration phenomenon or pattern is *strongly „imprinted” by the historical and cultural relations between several countries of the world;*

- Religious, ethnicity conflicts, or the wars occurring from these types of causes *strongly distort the population’s migrational flows.*

## ENDNOTES

(1) The 3Ds” Concept – Dirty, Dangerous and Demeaning, frequently met as Dirty, Dangerous and Demanding or Dirty, Dangerous and Difficult comes from the Japanese 3K expression: kitanai, kiken, and kitsui (J Connell, 1993). It is a concept used on large scale, especially as to work performed by the immigrant workers. Normally, workers who perform 3D type of activities should be well paid, due to: the undesirable of these occupations and necessities of attracting workers who would perform such works. Still, these jobs are not well paid due to a cumulation of factors, respectively: the existence of a significant number of workers which find it impossible to attract other types of jobs and the existence of a high unemployment or of a stagnant poverty which leads to the migration of the workforce.

Also, the evolution on a larger scale of the workforce international migration from the developing countries towards developed states, ever since the 19th Century and beginning of the 20th, has ensured an important stock of immigrants which wish to perform „3D” types of works, with lower wages than the native inhabitants. Developed countries’ big wages are a strong „pull” factor in the international migration; thus, a worker who emigrates from a developing country accepts a smaller wage for a 3D job in a developed country, in the conditions that this might mean a significant increase of wages compared to the country of origin. The examples which attest this phenomenon include the Indians and the Pakistani who emigrate in the Middle East to work in the constructions industry; in USA, the „3D” occupations performed in the past by Irish and German immigrants are currently held by Latino-Americans. As the name itself indicates—a dirty, dangerous and demanding work – such jobs have a series of serious consequences (both physical and psychological) upon workers. Many times, there is a risk of early retirement because of a work accident, exhaustion, or mental fatigue.

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