

## **BRAIN DRAIN MIGRATION TYPE. WHAT CAUSES BRAIN DRAIN PHENOMENON?**

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### **Abstract**

*The phenomenon of migration of intellectuals, also known as "brain drain", we mean that constant transfer of highly qualified persons, especially in generally into less developed countries, to those states that have a developed economy. Most often, aspects of the social environment of home country, are the triggering factor in the migration decision intellectuals. Reducing the negative impact of brain drain can be achieved through the transfer of "know-how" through collaboration between intellectuals in the Diaspora with those of the country of origin in some projects.*

**Keywords** *migration, brain-drain, know-how, high training*

**JEL classification:** *F2, F2, F60*

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### **1. Introduction**

The "brain drain" means that constant transfer of staff receiving highly skilled in less developed countries, for those states that have a highly developed economy.

The phenomenon of brain drain in Romania is felt especially in the last 25 years, and the negative effects are felt in all sectors of society, the economy, education, medicine, until the political area, leading to the conclusion that it is one of the most important causes of the crisis in our country. Drain the brain has found meaning in Romanian as brain drain, brain drain, brain drain or brain theft, theft of intelligence, skills drain. Explanation appearance brain

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drain phenomenon as it is a simple and results from one of the basic needs of individuals: the natural desire to increase opportunities for achievement, receiving recognition from others, achieving significant gains, living life higher, even if the price paid for obtaining them is leaving the country of origin.

However, a study of the Ministry of Human Resource Development of India, conducted in the Department for Education, revealed the conclusion that in taking the decision of triggering the migration of intellectuals, an important role is played by the lack of jobs, economic underdevelopment, low wages, overproduction and under-utilization of specialists, lack of research and facilities, employment discrimination occurring, poor facilities, lack of scientific culture and traditions, institutions broken or desire for a higher qualification and recognition.

Relating to Romania, we can say that there are two perspectives to analyze the phenomenon of brain drain:

- Globalization, reflected in the interest of multinational companies to recruit and attract people who benefit from highly skilled necessary to develop their own research activity;
- Increased migration among doctors, teachers, engineers.

Motivation migration decision is not always taken on grounds of financial, professional prestige but no disregard and lack of perspective and social system plays almost ineffective in turn an important role. But whatever are the triggers, the phenomenon of brain drain has disastrous effects for the country they came from. In some countries, the brain drain turned into brain gain; trying the counteract of negative effects of brain drain by attracting specialists and intellectuals, the development process in which they are standing as witness. Countries like China, Ireland, India, South Korea, Taiwan managed to re-attract senior-qualified staff who has been successful in countries where they practiced. About China it is states that it has stored overseas intelligence to use it later, and now is the right time to use it. However, country of origin, repatriation of the intellectuals is not the only way to showcase their knowledge and international experience. The transfer of good practices, of "know-how" that can by sharing experience in order to

conduct projects, conferences, symposia and other scientific events involving the participation of specialists from the country and from abroad, can generate workable solutions to redress both economically and culturally plans.

## **2. Evolution of the brain drain phenomenon over time**

Expression of brain drain, first appeared in 1962, in a report of the Royal Society of London and constituted the explanation of to the migration of scientists and specialists from the UK to the US, but the origin of this phenomenon is found in antiquity, when the Athenians complaints about the leaving of brightest minds they had to Alexandria. Initial analyzes of the phenomenon were focused only on the economic outlook, as a result of differentiation of "muscle power" and "brain power". However, migration of highly qualified persons became an integral part of international migratory flows (Brandi, 2001) where international migration tends to take on the configuration of a selection phenomenon (Tanner, 2005).

### **2.1. Aspects of Migration Flows of the XX century. Contouring brain drain phenomenon**

In the years before and after the First World War, migration was influenced by the development of new industries in selected countries as a destination, especially in the industrialized countries of Latin America, which saw a rapid economic expansion.

Racial and political persecution during the Nazi and fascist regimes between 1920-1940 have triggered a process migration among intellectuals, with consequences also in present days.

Given that, even after recording a wave of forced migration after the World War, the US continues to be the preferred destination for qualified professionals drawn mainly from Western Europe and Canada, while organizing the European Centre Research, in Lausanne, the first scientific congress on the brain drain phenomenon, the flow of European scientists to the US (Adams, Rieben, 1968), was one of the main topics of discussion.

During the years 1956-1961, scientists coming from England and Germany (28.23% and 22.59%) constituted more than half of the scientists who came to the US, representing 11.1% of total German scientists and 13.9% of British migrants to the US.

However, the disappearance of colonialism in the 1960s triggered the

emergence of a need for intellectual class in the new independent states. Political instability in underdeveloped countries was a decisive factor in triggering and very common migration decision, the consequences are significant in the cultural elite, but also the population.

Migration among people trained largely due to the increasing number of young students as academic institutions lacking in their home countries, have chosen to study abroad. Thus, there was an increase in the number of foreign students enrolled at universities in Australia, Canada, USA, France, West Germany and England, from 57,100 in 1950 to 261,400 in 1970. Originally, the origin of immigrants was from France and England, and within a few years, admitted foreign students who came mainly from the first colonies became almost equal in number to those who came from the US. However, students were aware that with the return to their countries of origin, their overseas qualifications will be underexploited underfunded national universities, with fewer opportunities for development, especially due to lack of economic resources.

The number of foreign students in the US after 1970 was 144,700 students compared with England and France, who were less than 40 000 of them (UNESCO 1998).

Since 1963 in England were introduced a series of measures to enhance the possibilities of British scientists work after completion of the British Royal Society a study on the negative effects can have on the brain drain phenomenon in England's economy.

## **2.2. Globalization, generating factor of brain drain**

Recording major changes economic and political plan in the early 1990s led to important changes in migration flows among persons with high training. International migration of highly skilled workers who wanted to improve their living conditions, employment and better wages was triggered by the Cold War, the dissolution of the Soviet bloc, increase production methods were closely correlated with innovation in scientific and technological fields, while necessity of a global market in which labor and capital to get free transferability character. The EU has concluded agreements that stipulate and ensure free movement of capital, workers and services. Globalization generate new opportunities in newly industrialized nations and has generated increasing number of skilled workers who choose to migrate temporarily or permanently from developing countries to developed countries

(Rudolph, Hillmann, 1997).

USA, Canada, Australia, France and England, are in constant competition that seeks to attract highly qualified human capital, particularly in the areas of technical, scientific and managerial. When they try choosing the destination country, highly skilled workers examine, on the one hand the advantages of the country of destination and on the other hand, political and economic benefits of competing countries (Cobb-Clark, Connolly, 1997).

USA registered until 1990 a number of highly skilled migrants eight times the number of migrants coming from developing countries aiming destination industrialized countries during 1961-1972, notwithstanding the foreign students (Docquier, Marfouk, 2004). The number of highly qualified migrants living in OECD countries has doubled between 1990-2000, compared with an increase of only 50% in the number of migrants who have only primary education (Docquier, Rapoport, 2004).

US has granted since 1990, a considerable number of residence visas for highly skilled migrants. Thus, in 1993, were 147,000, and then reduced to 85,200 in 1995. Of all those who have obtained a residence visa, 40% lived already in the US, visas are granted primarily to foreign students who have completed university studies in the US. The Chinese are an ethnic group that has contributed the largest number of skilled workers in the US since 1989 (Iredale, 2000).

US continues to be the favorite destination for workers worldwide, although some of them have very hard jobs that they consider appropriate to their qualifications and knowledge (Mata, 1999).

Another country that has attracted a significant number of skilled workers in the twentieth century is Canada. It has been estimated that the number of highly skilled migrants in Canada will increase by about 60 000 people per year (Rudolph, Hillmann 1997). Most migrants originated in Hong Kong, France and India.

Skilled migrants from Asian countries prefer Australia as destination, which have to onset 1980s permissive immigration legislation, especially for migrants who came from Europe, thus registering a significant number of immigrants, with elbows that not all were skilled migrants. After 1980, no changes to legislation designed to come in favor of skilled and people are judged primarily on the basis of their ability to contribute to the welfare and development of the country (Gaillard, Gaillard, 2001).

Industrialized States, particularly those in Asia and Latin America have

come to develop high-cost, higher education systems, which may be able to form highly trained staff, but failed to offer and places appropriate preparation work gained thus contributed to their migration (Boussaid, 1998) . In the same period of 1990, the Eastern European states were faced with the same situation themselves they were in developing countries, having to do with the effect of reverse technology transfer, resulting in poor countries pay training costs highly skilled professional workers who make their services available to developed nations.

### **3. The phenomenon of brain drain now**

Once the classification of professions in connection with their role in promoting the creation of knowledge society, labor market trends acquired as so-called profession breakthrough resulting in the stock of knowledge and technological inventions useful entry into the knowledge society and directs the main directions of development (researchers in the field of information and communication technology, elite professions, knowledge managers, researchers and innovators in biotechnology, nanotechnology, new materials, environmental technologies); whose training should be arranged in advance, a longer period of time, including training in education that will prepare future breakthroughs.

In traditional literature, brain drain phenomenon appears as a "curse" for developing countries, using its policies to combat or reduce the negative impact on countries of origin, including income tax received by migrants abroad (Bhagwati, 1976), (Bhagwati, Hamada 1975), (Bhagwati, Wilson 1989). New approaches in this area are saying that brain drain is a generator to gain benefits, since it is assumed that some force is skilled labor will migrate and earn a high income abroad.

New approaches argue that brain drain is amplified results generated for education; would lead to more investment in education; and the result will be a beneficial brain drain or brain gain net, leading to the reality that the brain gain is greater than the loss of brain; and a net gain of brain generates a high level of welfare and development.

However, the possibility that the positive effects of brain drain on the welfare and development community is less than the possibility of adverse effects.

In analyzing the phenomenon of brain drain is necessary to take account of new aspects in close connection with the creation and distribution

of information (knowledge) "- internationalization coded information on the occurrence of information technology, telecommunications and the Internet; - Increasing globalization of scientific and technological communities; - Demographic change and change the incentives for education, which directly affects the internal flow of the development of new human resources in science and technology (Human resources in science and technology - human resources in science and technology) " (Hansen, Soete, 2003),

The demand for skilled labor is increasing competition for highly qualified labor market and is currently included in the international competition between developed countries. Most developed countries face a significant shortage of scientists and engineers, due to the tendency broad demographic renewal because of insufficient public and significant reduction of interest in research. States as Japan, Germany, France and Italy, which have an aging population, are facing with an acute shortage of highly qualified researchers, especially scientists and engineers, which jeopardizes the long term, the real wealth and high level of income. If a society is aging, there will actually take advantage of the emergence of the knowledge society; and long-term inability is likely maintaining its competitiveness.

#### **4. Conclusions**

Policies that countries who "export" highly qualified human capital they have implemented to account for their tendency towards migration, can't do much in order to amend and economic political trend worldwide, thus proving ineffective.

In each country, depending on the specific economic, scientific and technological development stage, we are dealing with different counter-measures, their success is closely correlated with the existence of long-term government strategies. Globalization, while economic liberalization and global integration tilt the balance towards a mobile workforce, while stressing increase the standard of living gap existing between economically developed countries and those that are developing. In view of the natural change of migration, involving new methods in order to achieve and maintain an existing orderly movement of individuals within the globalized society, which requires continuous mobility, as Lipset was saying in 1959, "Who knows practically only one country know nothing ". (Lipset, 1959).

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