



**Bradramo - Brain Drain and Academic Mobility
from Portugal to Europe**

(PTDC/IVC-PEC/5049/2012)

**COLEÇÃO WORKING PAPERS
BRADRAMO**

Working Paper 1 - The Qualified Migration: Literature Review

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October, 2013

THE QUALIFIED MIGRATION: LITERATURE REVIEW

The multiple case studies are intended to test the theoretical hypotheses presented in the literature. Our hypothesis consist in assuming that the different migration flows as well as the contexts, projects, the paths of life and how biographical expectations are constructed and therefore can be understood by the concurrent models. The literature identifies five main theoretical models with different levels of empirical evidence.

The model of brain drain: since human capital is not made profitable in the same society or country where it was generated there is a loss of capital invested in the training of these individuals and, therefore, a potential loss of externalities that result from this investment in the medium and long term. There is evidence of negative effects on economic growth and human capital training in the country of origin (Miyagiwa, 1991, Haque and Kim, 1995). Thus the return of the educational investment can be loosed by the effect of emigration of human resources, measured through the return losses of capital or through loss development potential (Rosenbaum et al., 1990). The brain drain results in a subsidy to the rich countries (Hamilton, 2003) because the growth of most developed countries also stems from the concentration of human capital (Castles and Miller, 2003).

The model of a beneficial brain drain: since the emigration of skilled individuals results in higher individual income and this is made possible through their investment in education, then more individuals will be available to invest in their education and their children education and this will eventually increase the return rate to education in developing countries (Mountford, 1997). The results from this type of analysis are mixed. Some empirical studies proxying investments in human capital by the growth rate of the proportion of tertiary educated individuals find that the brain drain rate measured in the base period exerts a positive effect on the rate of change of the previous stock of human capital, interpreted as a brain gain (Beine et al., 2003, 2008; Docquier et al. 2008). On the contrary, Heuer (2011) modeling anticipatory expectation-building and accounting for possible convergence forces in the accumulation process of human capital, reveal a strong negative effect of the occupation specific emigration rates on the sending countries employment shares, which suggests an inexistent brain gain compared to the brain drain.

The model of the cross fertilization movement of elites: since the international mobility of skilled human resources is often transitory and takes on characteristics of exchange of knowledge, skills, and temporary projects, this circular process is beneficial for both developed countries and developing countries. Olesen (2002), criticizing the study of short-term impacts of brain drain, says that the benefit to the country of origin may occur in the medium term. The highly skilled emigrants who leave their countries of origin for more than 10 years send savings while abroad and transfer human capital, financial

and social when return, beating the immediate negative effects. Faini (2003) instead concludes that the qualified emigration provides remittance flows for instance reducing the financial return. Moreover qualified mobility can occur regardless of salary benefits obtained (Mahroum, 2000). For these groups the economic motives represent only a part of the reason for migration, and may even be accompanied by negative economic effects (Forster, 2000).

The model of brain circulation by creating networks: since scientific and business transnationalism results in networking in order to transfer technology and knowledge from the host countries to the countries of origin, it is expected that the increase in the circulation of knowledge and people in the context of globalization is inevitable, regardless of the level of development of countries of origin. The temporary movement of highly qualified individuals appears to complement with increasing frequency the long-term migration, especially among industrialized countries (Straubhaar, 2000). The networks formed by scientific diasporas and business have frequently sought to use the knowledge and skills acquired by scientists and other expatriate professionals in the development of the country of origin (Meyer, 2001).

The model of latent brain drain due to the mobility training: as mobility training, or for graduate studies or post-graduates, worsened in the last decade, the outputs to study abroad, with or without grants, originally planned as temporary, may become permanent due to the insertion in the labor market of developed countries or less affected by unemployment of young workers (Pizarro, 2005). However, there is also evidence that a period of study abroad, followed by a work experience in the destination country can become a medium-term benefit on the return (Johnson and Regets, 1998).

The literature review allows us to conclude that the traditional perception of the brain drain has no empirical evidence on the aggregate level, being necessary the understanding of the circumstances and factors that influence the process in each country (Beine, Docquier and Rapoport, 2003). This research aims to make a pioneering study of this type in the Portuguese context, still innovating in conceptual and methodological terms: first, refusing the logic of globalizing assumptions of human capital theory, guessing that migration can be caused by factors other than not pay gap by analyzing the set of factors of attraction-repulsion; on the other hand, guessing that the international job system is not a space entirely free and therefore is not only dependent on the free play of supply and demand, is also necessary to observe the biographical trajectories in order to understand the reasons and destinations of migration.

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