

INVESTMENT IN HUMAN CAPITAL – AN INVESTMENT IN FUTURE

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Abstract: The paper aims to study, reveal and understand one of the most important production factor, considered by some as being labor, understood nowadays as human capital. It is important to reveal and to demonstrate that the investment into human capital will have results with a very high return on investment, maybe not so seen in the first years to come just after the investment, but for sure as a big result and a cause for economic development. The investment into human capital can be determined by public or private investment. Either the case the result will be in favor of the national economy.

Keywords: investment, human capital, economic development, labor flows.

JEL codes: A10, A14, D24, I28.

1. Introduction

In economic perspectives, capital is generally thought to be assets that serve as resources for a company. The term human capital is a component of capital and has many definitions, with most relating to the knowledge, skills and abilities that people bring to a specific job within an organization (Young, McManus, & Canale, 2005). Some describe human capital as a “commercially valuable skill” (Marcus, Ippolito, & Zhang, 1998, p. 490), while others describe human capital as “the attributes of a person or people that are productive in some economic context” in an organization (Econterms, 2004) According to Nobel laureate Gary Becker, education is investment to us, which raises one’s productivity and thus the remuneration. Better known as Human Capital Theory, this concept describes its mechanism within the framework of economic analysis. (See Becker (1974)). What maybe Becker did not take into account is not only the benefit for the individuals, but also the benefit for the society and for the national economy as a whole. Those benefits can be expressed in value as remittances for those that are working abroad and sending money into the country and also at the level of knowledge, know-how, possible to be brought in the home country. We must say that is for sure those individuals, in which states are investing and in the end they are working elsewhere, the investment is not totally lost, or we must say that the investment is not lost at all and this because of at least two reasons. One, in the case that they are working abroad usually they are in the case of having remittances, which can be a very powerful and quite cheap way to invest in future generations. On the other hand if they are working abroad and let’s assume that they are not sending nothing back, at least they are producing more goods and services, so that the possibility of imports of cheap and very good, products from which is benefiting the entire society and not only the producer’s country.

We can, and for sure must see the education as an investment, an investment into the future, and also we must see the education as maybe the most important public spending policy, because, it has the most certain way to have the highest return on investment.

On the other way we must see the investment into education from the point of view of the training on the job. Maybe we should see this problem as a continuation of the education started in the early stages. More and more we are speaking about long life learning program as a follow up of the high school program and bachelor in the universities.

The other important way to analyze and to develop the investment into human capital is the return on investment. If in the first two cases it is quite easy to debate, because we think that it is quite impossible to measure the positive or negative effects, in the case of remittances for example those can be measured quite accurately together with the percentage from GDP to be invested into education. Maybe it is a link, maybe not, but for sure those two elements can lead to enough elements in order to link the degree of education, level of the education and the income for the national economy seen as remittances. For the countries on the way to development it is one important way to have cheap money.

2. Human capital theory

2.1. Education as an investment

According to the theory, one would pay for the education up to the point where the present value of the costs equate to the present value of the stream of income generated by the educational achievement. In the case of the university the total costs are composed of the costs with the tuition fees and the opportunity costs (for example the income at which the individual has to renounce at in order to be able to take course). Of course this opportunity costs can be as to say recovered from the difference in payment that can result from a higher wage due to a higher qualification. Unfortunately this possible increase in wage is not certain, but, the loss of the wage in the university years it is. So the individual has to decide between a possibility and a sure thing. As other investment taking risks can lead to increasing revenues or higher losses. For instance the cost of a bachelor program in USA can go till the level of 30.000 – 50.000 US dollars in comparison to the cost of approximately 2500-5000 euro in a country on the way to development. Of course a degree obtained into a university considered to bring more knowledge can be the “cause” of a very well paid job. So maybe the effort is worth taking. Once again it is not sure.

There are a few functions that can be used in order to determine the annual rate of return to education by using the years of education in order to obtain annual earnings. Those functions are called Mincerian wage function (Mincer (1974)).

Or an internal rate of return, a familiar concept in investment literature, may be derived for the case of education by equating present values of costs and benefits of education. The internal rate of return to education usually falls between 5 to 10 %, being greater than that of typical financial investment. (See, for example, Sveinbjorn et.al (2002)) However, many question the meaning of such economic returns to education. The educational credential is also known to act as a signaling device, since the future employee’s productivity is not revealed before the employment takes place. It is a proof of his/her ability at workplace. The empirical difficulty, however, is to verify whether education raises productivity as in the human capital theory or reveals it as in the signaling theory, since in either case education is likely to raise earnings. Still, it is probably safe to say that it has the both elements.

2.2. On-the-job Training

By and large everyone faces an initial period of difficulty when he/she starts working, which will gradually sooth away, and then the wage will eventually start rising. This suggests “there are certain skills you can only learn at workplace so that the longer you work the more productive you become,” and this is the idea of “On-the-job Training” or “Learning-by-doing.” Becker (1964) divided OJT into two types: general training and firm-specific training. General training is a training of skills which can be used in any firm and therefore the trained worker can raise his/her productivity in any firm, while firm-specific training cannot raise the worker’s productivity other than in the training firm.

This argument raises an issue about the incidence of OJT costs. The basic idea is as follows. If OJT is general then the worker can use the skill wherever he/she goes and thus it is worthwhile

for the worker to pay for it --- on the contrary, the training firm will not be able to recover the investment if the worker decides to leave and so there is no merit in paying for it. If, on the other hand, OJT is specific then it will not be in the interest of the worker to pay for it as this OJT does not affect his/her productivity anywhere else and thus it would be the firm to pay for the training. This distinction, however, is a highly theoretical one and in reality any OJT is likely to be a combination of both elements

3. Remittances

If we want to see the importance of the education we must present a few data's concerning the size and the importance for the remittances in the economies no matter those economies are weak or strong.

In each case we are speaking about huge sums of money, sums that sometimes are the same or even higher in comparison with the level of the budget for the educational field either the public or the private one. The migrant workers are accumulating knowledge in the countries in which they are going, they have access to technologies, sometimes transferring back home, sometimes not. Even in those cases some researchers are having doubts into linking the development with migration. In their perspective this link is much more complex and if it is not well achieved it can produce much more negative than positive effects. For some authors the gainers are the destination countries and not the origin ones. In our view all the time from the international trade benefits the most the country which is poorer and not the wealthy one, this being also a reason for the migration.

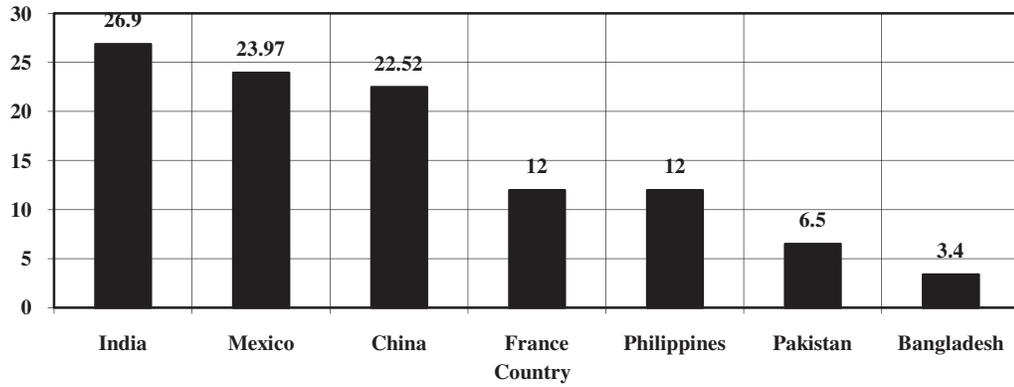
Remittances and their weight into the international trade for some countries

Country	Remittances (billion of US dollar)	% in EXPORT	% from IMPORT
Romania	750	9,0	6,3
Poland	2897	6,6	5,5
Hungary	1018	3,9	3,7
Cech Republic	408	1,2	1,1
Slovakia	366	2,8	2,3
Bulgaria	230	3,8	3,8
Slovenia	112	1,0	0,9
India	10280	21,6	17,3
Greece	7510	50,5	29,3
Mexico	6014	4,6	4,3
Turkey	5727	10,5	10,3
Egipt	4403	32,6	20,1
Portugalia	4031	11,6	8,8
Spain	3249	2,0	2,0

The level of the remittances in the first 7 countries of the world (2009) (billions of US dollars)

Country	India	Mexico	China	France	Philippines	Pakistan	Bangladesh
Remittances	26,90	23,97	22,52	12,00	12,00	6,50	3,4

Remittances



ROMANIANS REMITTANCES FOR 2000-2008 (BILLION OF USD)¹⁴⁸

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total inflow, out of which:	96	116	143	124	132	4,733	6,707	6,800	7,000
Remittances of workers	2	4	7	14	18	3,754	5,506	-	
Employes compensation	94	112	136	110	113	954	1,157	-	
Transfers for migration	-	-	-	-	1	25	44	-	
Total outflow, out of which	6	5	7	8	8	34	56	-	
Remittances of workers	1	1	-	1	1	4	6	-	
Employes compensation	5	4	6	7	5	24	42	-	
Transfers for migration	-	-	1	-	2	6	8	-	

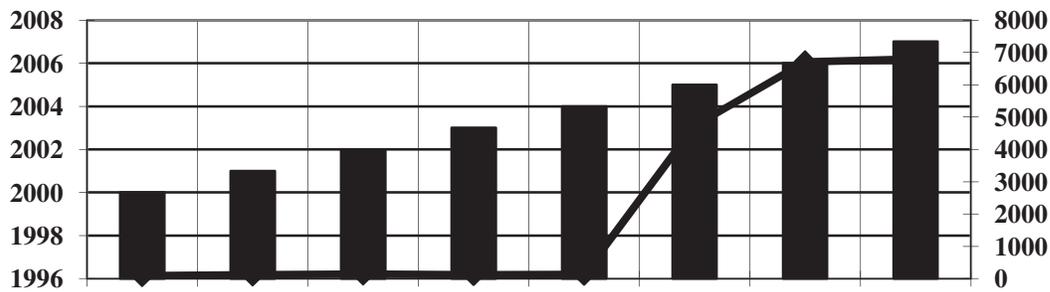
World Bank is considering that the level of the remittances for our on the way to develop country is to represent approximately 5,5% from the GDP.

ROMANIANS REMITTANCES FOR 2000-2008 (BILLION OF USD)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Sum in billion US dollars	96	116	143	124	132	4733	6707	6800	7000

148 Source: data's from the World Bank Report. <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21352016~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

Remittances of romanians between 2000-2008



4. Difficulties regarding the investment into human capital

There are a few problems to be discussed when a government is having investment into something. The investment into human capital is bringing together with common problems of the investments in general some other specific problems.

- Existing tax laws discriminate against the investment in human capital, sometimes they do not have a fiscal deductibility.
- Unemployment (i.e., sitting idly) causes human capital to deteriorate so the investment sometimes is not for life.
- There are hindrances to free choices of professions. In this situation it is possible that one investment to be fully lost if the individual is changing field.
- There is a need to provide funds for investment in human capital, and thus, long-term public and private loans should be made available to students. This can be a problem in the situation of low financement of the educational system or in the cases of financial crises when investing can represent a problem.
- There should be investments made in migration (i.e., in helping people settle and find education). This can be seen as a problem to be considered also when we speak about remittances.
- There has been a failure to adequately invest in those who sit on the periphery of society. This can be a problem when we are speaking about education as a cause and a necessity for the free market system.
- The return on public investment in human capital should not be returned directly to each individual. The individual will see a return in the form of wages, and will benefit from a strong economy.
- As a society, underdeveloped countries should be assisted to achieve economic growth, and to begin investing in human capital. This is a very important measure in order to be taken by those countries that are considered as being emergent countries and this can be a quite sure investment in order to diminish the gap to developed countries.

5. Ideas for future considerations

There is no doubt that the demand for higher education continues to grow globally. This comes together with the decrease in the population number and still the number of students is increasing a lot into these times.

Maybe the experience of those countries that have invested into education was an example, a good example for the emergent economies. Yes it is necessary to have funds in order to invest. And for sure when we are speaking about funds we need to take into account also the choice, to invest in education or in something else.

Maybe the investment in education will not show directly and obvious the benefits of the investment, in comparison with some other investments, for example in communication services. Yes we must say that the investment into education should represent a basic investment, a start for the other investments

The realization of return to educational investment is a long term process and it is not simple to quantify the outcome, which often results in underinvestment --- this is one of the reasons why free education exists particularly at primary and secondary education with governmental supports.

It is important that the companies should receive fiscal and financial support in order to invest in education. So a help provided by the governments, by the law regulators it is not only obvious but also necessary.

Paul Bouchard, in his article entitled "Training and Work; Myths about Human Capital" challenges seven basic assumptions used in the theory of human capital. Briefly, they are as follows:

Problem 1: Human Capital is in investment in the future.

-It is impossible to accurately predict future labor market needs. All the forecasting tools we have are problematic. Not only for the developed countries but also for the emergent ones and also at the regional level.

Problem 2: More training leads to better work skills.

-Organizations value particular skills and what these are often change over time. There are not necessarily 'better' skills, just ones that fit what serve the needs of the organization at the time. This is also a solution when we are speaking about structural unemployment. It can become a solution of requalification of the labor force.

Problem 3: Employees need to improve their skills.

-Work has not become more complex, in fact, with technology things have become 'easier'. The need to improve one's skills comes from having to compete in a job market with people who are in many cases over-qualified. So sometimes the need for qualification is not for increasing productivity but to become more competitive between workers.

Problem 4: Training enhances employability.

-Many individuals do not have access to training and thus access to jobs, while others may have access to training, but not to mobility within the organization.

Problem 5: Training can compensate for skill shortages.

-Bouchard argues there are not skill shortages, rather there is a skill-mismatch. In other words, for various reasons, individuals with appropriate skills do not find work. Three potential reasons for this are: labor market dynamics, structural discrimination, and employee self-selection.

Problem 6: Employment and unemployment are economic concepts.

-The labor market is NOT a market like any other. In all situations, but with very few exceptions, the supply of labor force will exceed the demand for labor force. So that the problem of qualification for workers it is a problem of becoming more competitive on this specific market. There are social forces present that keep people from having equal access to employment regardless of their skill and experience.

References:

1. Bouchard, P (1998). "Training and Work: Myths about Human Capital". In Scott S., Spencer B., and Thomas A. (Eds.), *Learning for Life: Canadian Readings in Adult Education*, Toronto: Thompson Educational Publishing, Inc.
2. Bowles, S. and Gintis, H. (1976). *Schooling in capitalist America: Educational reform and contradictions of economic life*. New York: Basic Books.
3. Becker, G. (1964). *Human Capital* (8th ed.). The University of Chicago Press.

4. Becker, G. S. and K. M. Murphy (1992). The division of labor, coordination costs, and knowledge. *Quarterly Journal of Economics* 107, 1137{1160.
5. Bester, H., A. De Palma, W. Leininger, J. Thomas, and E.-L. Von Thadden (1996). A noncooperative analysis of hotelling's location game. *Games and Economic Behavior* 12, 165{186.
6. De SOUZA (2006), Using return migration as a development tool - Are the right policies in place?
7. Rubenson, K (1992). "Human Resource Development: A Historical Perspective". In L.E. Burton, In *Developing Resourceful Humans: Adult Education Within the Economic Context*, New York: Routledge.
8. Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review* 1(2), 1-17