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# Foreign Direct Investment and Human Capital Formation

**ABSTRACT**

**Objective:** The main objective of this paper is to reveal the relationship between foreign direct investment (FDI) and human capital.

**Methodology:** The analysis consists in a presentation of main achievements in the literature regarding the contribution of human capital to the attraction of FDI.

**Findings:** The investment in human capital formation has led to the increase of labour productivity. This will ultimately result in economic growth. Education has the most important role in the process of human capital formation.

**Value added:** FDI has an important role to play in human resource development through its ability to enhance new skills, information and technologies in multinational enterprises. In this way, FDI becomes a determinant factor for education and professional training, because it is the link between the immediate reality based on creation, introduction of new skills, new technologies and provision of a wide range of information and initial training direction.

**Recommendations:** The economic policies should focus on the attraction of FDI that ensures the improvement of human capital quality. On the other hand, the education policies should focus on a better connection of the human resources to the requirements of the labour market and to offer acknowledge and practice that will help the graduates to correspond to the expectations of foreign investors.

**Key words:** foreign direct investment, human capital, education, entrepreneurship

**JEL codes:** I25, J24, M51

## Introduction

Education, as an influence factor in the progress and sustainability of a firm, requires a consistent investment in qualified and overqualified human capital, making it a priority. Although investment in this type of capital becomes a priority, its effects are not immediately visible, as a sustainable investment takes longer to achieve, and when it comes to education, the process extends over long periods of time. The knowledge society is focused on improving the quality of human resources, increasing investment in education, stimulating R&D activities through public-private partnerships, encouraging local initiative. It creates the conditions for developing and consolidating an administrative system that is actively and efficiently involved both in solving internal problems and those related to particular requirements of investors, thus encouraging businesses to invest in activities beneficial to the development of local resources (Ivan & Iacovoiu, 2008).

Economic growth in developed and developing countries is influenced both by the degree of human resource development specific to the countries concerned and by their FDI attraction. The two engines of economic growth – foreign direct investment (FDI) and human resource development (HRD) – also work through interdependence of complementary effects (Miyamoto, 2003; Simionescu, 2016a; Simionescu, 2016b). In this respect, a country that benefits from quality human resources and which forms an

attractive investment climate, comes to the attention of foreign investors, thus contributing to the quantitative and qualitative increase of FDI. In addition, increasing labor force skills, socio-political stability, and improving the health system of a country also contribute to attracting foreign investors (World Bank, 2003; UNESCO and OECD, 2003). As Su et al. (2018) specified, the FDI might support the sustainable development of a country by improving the quality of human capital. Moreover, Berrill et al. (2018) highlight the role of education and FDI in explaining the levels of entrepreneurship of a country.

## The role of education in human capital formation

Against the backdrop of social and economic dynamics, investment in education and human capital formation are becoming desirable for public policies, the fundamental goal of which is to raise living standards. Human capital education and training have an essential role in guiding the individual on the labor market, through the opportunities it offers, the quality of the provided technologies, and the quality of a curriculum adapted to current needs (Grigoruța, 2005/2006).

Improving the quality of human capital through a comprehensive educational system is aimed at educational reforms tailored to the changing information and technological context, the improvement of learning content and continuous professional training. In addition to the development of human capital, employment is a priority, and it is necessary to quickly integrate human resources into the labor market. In addition to increasing the adaptability of the workforce and enterprises to the changes that are constantly registered in the knowledge society and economy, employment also implies the support of an entrepreneurial culture in education and training (Ivan & Iacovoiu, 2008).

Economic development is dependent both on the quality of the country's economic infrastructure, the cultural and educational identity, as well as on the influence it exerts on entrepreneurial relations. The more entrepreneurs are

supported in their actions, providing them with a favorable environment for development, the more entrepreneurs are attracted, thus contributing to the development of the entrepreneurial economy. Education and training specific to the educational field play an important role in economic development, while helping to redefine the structure of the labor market in order to facilitate professional adaptation and adjustment of labor supply to labor demand.

Entrepreneurship education and training refer to the type of knowledge to be acquired for the development of a profitable business, but also to the experience gained by solving the problems that require entrepreneurial decisions (Audretsch, 2007).

Entrepreneurship can help to bridge development gaps and raise living standards for developing countries (Abraham, 2015). In the case of Romania, due to the limited promotion of entrepreneurial culture and due to the failure of developing an entrepreneurial spirit in young people, we cannot speak of an entrepreneurial tradition, although projects to form and develop entrepreneurial skills have been developed, at a formal level (Niculescu, 2015).

The education system has an important role in developing and strengthening the entrepreneurial skills. In the context of the rapid dynamics of the knowledge society and economy, which support the progress, productivity and competitiveness, entrepreneurship education has become a necessity and an area of interest for decision-makers in the educational system. They have become more and more concerned with the development of the entrepreneurial skills of the young generation. The activities proposed in the framework of entrepreneurial education contribute to shaping the profile of the personality of young people in line with the challenges of the current society.

With the onset of world crises, new measures have been taken to sustain economies and to develop innovative entrepreneurs. The preoccupation for innovation and creativity of the young generation, in making decisions and taking action to facilitate economic recovery and job creation, has become crucial. Relying on solving social problems, entrepreneurship assumes the role of identifying the efficient way of organizing resources (Zadek & Thake,

1997). In this way, entrepreneurship becomes a form of innovative approach to society through its entrepreneurial programs developed at the level of the whole society (Soare, 2008).

Entrepreneurship education also comes to the attention of private companies and non-profit organizations, responsible for providing resources and practical experience. They can intervene in providing practical experience, as knowledge and innovation are among the competitive assets of as many companies as possible. Company investments in training and development of employees can help increase the number of specialists and the competitiveness of companies.

Market globalization influenced the world economy and facilitated the recognition of entrepreneurship as one of the strategic objectives of public policies for growth and employment in Europe. Entrepreneurship supports the consolidation of the knowledge-based economy, making an important contribution to addressing environmental and social issues. Entrepreneurial policies, centered on creativity and innovation, are increasingly focused on creating new products and services (Mihăilă, 2014). In this context, entrepreneurship education becomes a determinant of FDI, with a positive impact on human capital, its attitude and availability for private initiative and its role in the economy and society. The connection of the Romanian economy to the European standards of globalization was also facilitated by FDI (Zaman & Vasile, 2006).

Developing the entrepreneurial capacity of young people in order to achieve goals aimed at improving creativity, innovation required by society and the knowledge economy has become a desideratum of economic growth and the role of entrepreneurs in society.

Given the fact that youth unemployment is a hindrance to the accumulation of human capital, which is necessary for the economic growth of a country, it is essential to create jobs for young people (Schoof, 2006). The need to reduce unemployment by creating employment opportunities for young people has thus become one of the main objectives for policy makers. Promoting entrepreneurship as a means of inserting young graduates

into the labor market contributes to the country's economic growth and considerable social benefits, such as promoting social inclusion, improving self-confidence of young people, reducing the risk of juvenile delinquency, stimulating innovation (Zamfir et al., 2013).

Entrepreneurship is considered by some researchers as a career alternative, through which young people acquire the skills needed to open and manage a business, following an educational and entrepreneurial learning process. (Chigunta, 2002). Developing the spirit of initiative, innovation, creativity, risk-taking and ability to perform in specific economic and cultural environments are among the specific characteristics of youth entrepreneurship education (Schoof, 2006). Entrepreneurial behaviors can only be acquired in the institutional and business environment, which makes it necessary to create a stronger link between these two environments.

In the Romanian society, a considerable effort is needed from all economic actors to support entrepreneurship education. As mentioned above, the benefits of entrepreneurship generate positive externalities in any field of activity. The degree of absorption of the labor market is also dependent on the level of entrepreneurial education developed at some point in a society. Developing entrepreneurship helps to increase competitiveness and the number of jobs. In this context, policies have been developed within the EU to take into account, among other issues, the development of entrepreneurial culture and the stimulation of as many people as possible to become entrepreneurs (Mihăilă, 2014).

In this context, the basic concern of modern education should be to strengthen entrepreneurial skills among young people and to increase their capacity to adapt to the demands of the workforce.

## The role of FDI in human resource development

FDI has an important role to play in human resource development through its ability to enhance new skills, information and technologies in multinational enterprises. In this way, FDI is becoming a determinant factor for education and training through the link they establish between immediate reality based on the creation, introduction of new skills, new technologies and the provision of a wide range of information and the initial training direction. The complementary effects that contributed to the interdependence of the two major factors of economic growth in host countries generate an increase in FDI flows while at the same time continuing to improve qualification in multinational and pre-existing national enterprises (Miyamoto, 2003).

Although all studies are based on cross-country and longitudinal analyses for developing countries, there are insufficient cross-cutting analyzes to identify and demonstrate concretely the influence of the actors involved in attracting FDI. In specialized literature, the quality of human capital is specified as a determinant of FDI, although there is a difficulty in constructing explanatory variables to reflect this indicator. Moreover, the difficulty increases in ensuring the coherence of the variables for all countries. However, depending on the specificity of the transversal studies, the literature presents two different approaches (Noorbakhsh et al., 2001).

The first analysis was applied for the period 1960-1980, and the second refers to the period 1980-1995. Among the representatives of the first approach are Root and Ahmed (1979), Schneider and Frey (1985) and Hanson (1996) and Narula (1996). Root and Ahmed (1979), who, using data for 58 developing countries, demonstrated that no variable used for human capital and skilled labor is a statistical determinant of FDI. Schneider and Frey (1985) have used data for 54 developing countries and have shown that economic and political influences are a more important determinant than the group of secondary school graduates. And Hanson (1996) showed, based on a sample of 105 developing countries, that the socio-political variable has a greater

influence on attracting FDI to the adult literacy rate. Finally, Narula (1996), using data for 22 developing countries, demonstrates that even higher education graduates cannot be considered a significant variable for attracting foreign investors (Miyamoto, 2003).

The analysis of the four transversal studies has shown that human capital is not a determining factor for attracting FDI. It should not be forgotten that in the 1960s, 1970s, FDIs in developing countries are centered more on the type of production and less on the search for the best resources. Thus, the highly qualified workforce was not a determining factor for attracting foreign investors. Moreover, at that time, human capital was not a very frequent indicator in studies (Deyo, 1989; Ritchie, 2002; Dunning, 2002).

Representatives of the second approach, specific to the 1980s and mid-1990s, including Noorbakhsh et al. (2001), UNCTAD (2002), Nunnenkamp and Spatz (2002), showed that variables related to the availability and flux of human capital have statistically significant and positive effects on FDI.

After comparing the two groups of studies, it can be seen that, in addition to the statistical significance, the variables used vary from one period to another depending on the context, the level of production, the second group using recent data for firms producing goods with a higher added value (Miyamoto, 2003).

The need to increase efficiency and invest in the highly skilled workforce required by SMEs operating in developing countries is specific to the period 1980-1990 (Dunning, 2002; Nunnenkamp & Spatz, 2002). And UNCTAD, following studies in the 140 developed and developing countries, identifies a significant correlation between human capital and FDI inflows (UNCTAD, 2002). Nunnenkamp and Spatz (2002) have shown the importance of education as a determining factor for attracting FDI.

Following cross-sectional studies conducted over the period 1980-1990, it has been found that for SMEs focused on efficiency, human capital is becoming an important determinant of FDI attraction, but for resource-focused SMEs, human capital is not a priority. A proof of this is the case of



Southeast Asian countries which, before the entry of FDI into the country, did not consider investing in industrial upgrading and innovation for the transfer of production from the inferior to the higher sector (Deyo, 1989; Ritchie, 2002). Neither have the African countries, which have benefited from large inflows of FDI in search of natural resources, stimulated investment in human capital. Also, in the field of education it is not specified which type of human capital is most effective in attracting FDI. Limited evidence in this respect also exists in terms of level, type of formal education and experience gained in companies.

However, it can be seen – as a result of studies in the field of education – that the level of schooling (secondary or tertiary) is among the variables used to reflect human capital. Also, we do not find any comparison between levels or types of human capital in any study conducted to identify the most effective type or model (Miyamoto, 2003).

An example of poor investment in human capital formation due to information gaps is provided by the WBES results, which show that firms in East Asia and the LAC region are investing very little in training and development. Not knowing the techniques of human capital development and organizing is an impediment both in the development of labor resources and in attracting investment. Also, the uncertainty about the benefits to be gained from training is another reason why the process of attracting investment and developing human capital is hampered. In this respect, it has been attempted to implement training policies in order to facilitate the dissemination of information on the importance of human capital formation and the willingness to participate in the promotion, participation and organization of training. This approach, which is specific to training policy models, is specific to developing countries such as Malaysia and Mexico (Miyamoto, 2003).

In the case of Malaysia, a DDIT (Double Deduction Incentive Scheme for Training) was established in 1987 to show the importance of investing in human capital formation, but there has been a decrease in efficiency over time for this scheme. And in the study on industrial training and productivity

in Malaysia, developed in 1995, it is noted that there is a low investment in training and development of employees.

In 1993, the Human Resources Development Fund (HRDF) was set up, with representatives from the private sector and from government agencies committed to developing and managing the incentive scheme by providing grants to support the formation of human capital. The HRDF, through workshops tailored to meet training needs, facilitates the dissemination of information regarding training, in order to choose a new scheme that has ultimately led to increased use of employee training funds (World Bank, 1997).

In its desire to propose subsidized training to small and medium-sized enterprises, Mexico organized the CIMO (Integrated Quality and Modernization Program) in 1988. Initially, a pilot program was launched, followed by training activities through a specific information campaign for the implementation of the program, activities that materialized in workshops aimed at explaining the fundamental characteristics of the new scheme approached. The purpose of the information campaign was to provide small and medium-sized businesses with assistance. It has also been found that CIMO has facilitated and reinforced intensive participation in training programs, as demonstrated by studies undertaken in this direction (World Bank, 1997).

This explains why, before starting an activity that requires both theoretical and practical skills, the large companies have suggested to all the employees to take part in development courses relevant in their field of activity. An example of this is mentioned in Shaiken (1990), which shows the importance of technical training for greenfield investments to set up a Ford Motor Company in Mexico. For the successful deployment of this investment scheme, all employees were sent to training.

Also, Fleury and Humphrey (1992) and Liebau and Wahnshaffe (1992) have shown the importance of these investments in technical training, investments similar to those in new technologies. However, it is necessary to assess whether these technical skills, developed and educated through training programs within companies, correspond to the specific characteristics of the

firm and can be applied at the level of the local industry (Blomstrom & Kokko, 2003). In a recent study, Majumder (2019) proved the role of FDI in increasing the quality of human capital in the case of Bangladesh using an ARDL model.

A second reason for the investment shortage in the formation of human capital is the employee turnover. Staff turnover has become a factor that limits training activities. To address this shortcoming, also visible in the labor market, some governments considered it appropriate to levy tax on wages or corporate income taxes in order to stimulate firms to invest in training and development. Kottaridi et al. (2019) showed the tendency of FDI to be located in countries with highly educated population.

## Conclusions

Investing in human capital formation results in increased labor productivity. This will ultimately lead to economic growth. Education has the most important role in forming human capital.

It is necessary to invest consistently in new modern technologies, but also in the education of human resources to acquire the necessary skills for using these technologies. Given the characteristics of new global jobs, the UNESCO report (2004) advocates the need to involve the education system in integrating new technologies to better target human capital on the labor market.

The process of adapting education and training of young people to the needs of the global economy is supported by the relationship between education and the labor market. Institutions and firms involved in hiring young people leaving the university are concerned with the capacity of the educational process to provide them with the skills needed to adapt to the competitive environment on the labor market (Bedrule-Grigoruță, 2005/2006).

In conclusion, investing in human capital can generate economic performance, and the stimulation of the educational process will become a responsibility of all political decision-makers. However, it would be recommended to

support this conclusion by processing empirical data. Therefore, in a future study, the relationship between FDI inflows and human capital expressed as population according to level of education will be checked for the EU countries.

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