

WHY DO WE NEED HUMAN CAPITAL INDEX?

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Abstract: *As technology advances, it establishes and operates on knowledge emerged from the factors of production increased from the role of the human factor, above all, be seen by a unit value that has growing resources and is able to move more and more production value to produce as before. Human resource development therefore plays an important role in an entity, a village, a region, a country's performance greatly affects the value established by the size of the observed area of development and development opportunities. Human capital endowment measures the cost of all types of education and training a person receives. The human capital stock of an economy is made up of the human capital endowment of an average person multiplied by the number of individuals participating in the economy. The human capital endowment referred to a sum of total investment in five types of human capital development, including not only formal education but also, quite prominently, informal education of both children and adults. Each component can be measured either in terms of direct expenditures or in terms of opportunity cost. The United Nations Development Programme publishes every year since 1990 the Human Development Index, with a view to the world countries in human development of the measure and compare. The Human Capital Report generates the Human Capital Index. The Index quantifies how countries are developing and deploying their human capital and tracks progress over time. It takes a life-course approach to human capital, evaluating the levels of education, skills and employment available to people in five distinct age groups, starting from under 15s to the over 65s. The Index covers 124 countries, representing between them 92% of the world's people and 98% of its GDP. Human capital is not a one-dimensional concept and can mean different things to different stakeholders. In the business world, human capital is the economic value of an employee's set of skills. The Human Capital Index reveals several trends and challenges in the current education, skills and jobs agenda and the future outlook for major economies it helps to rethink how the world's human capital endowment is invested in and leveraged for social and economic prosperity and the well-being of all. Ageing economies will face more and more of their population's cross into the 65 and over age group and their workforces shrink further, necessitating a better integration of youth, female workers, migrants and older workers. Youth-bulge economies face burdens of a different kind as a very large cohort of the next generation-one that is more connected and globalized than ever before-enters the workforce and with very different aspirations, expectations and worldviews than their predecessors. The Human Capital Index is among the set of tools that we hope will enable better decision-making in this direction.*

Keywords: human capital, human capital index, education, labour market, labour force, knowledge.

JEL classification:

O15 - Human Resources • Human Development • Income Distribution • Migration, J24 - Human Capital • Skills • Occupational Choice • Labor Productivity.

1. The Human Capital

Wikipedia defines human capital as follows: „*Human capital is the stock of knowledge, habits, social and personality attributes, including creativity, embodied in the ability to perform labour so as to produce economic value*”.

Human capital is part of the individual's accumulated knowledge, experience and part of the developed abilities, including the emotional richness of and the desire to act. According to the OECD (1998) human capital is the individual's knowledge, skills, competencies and attributes.

Human capital, human resources and human factors concepts in publications often used as synonyms for authors, although the difference between them is essential. The capital is generally defined as a commodity produced, human capital is also a result of production within family, as well as through training takes place. In this definition I use the training in the broadest sense, which includes training implemented in different educational institutions, and self-education by means of which the human intellectual, physical qualities to develop. Human capital is therefore a productive factor, which is involved in the process of production value.

A comprehensive human capital specification must consider all the investments that people can carry with them to improve productivity. Such investments include formal, non-formal and informal skills acquired through training and workplace experience learning through practical activities. Moreover, these effects of human capital on economic growth have not been validated empirically, due to the lack of consensus in particular the theoretical basis of estimation methods that weaknesses in each approach, shortcomings can be two ways: either the method used does not adequately reflect the key elements of human capital or the data used are of questionable quality.

Valuing stock of accumulated knowledge is therefore essential for territorial development, given that we are witnessing a reduction of material resources, increasing competition in global markets. The accumulation of human capital is the source of economic growth but also the consequence thereof. Any territorial development strategy must take into account both quantitative and qualitative characteristics of current and future human resources, highlighting strengths and weaknesses and prefigure developments to intervene effectively. Valuing human capital can be a competitive advantage in the territorial when classical resources are lacking.

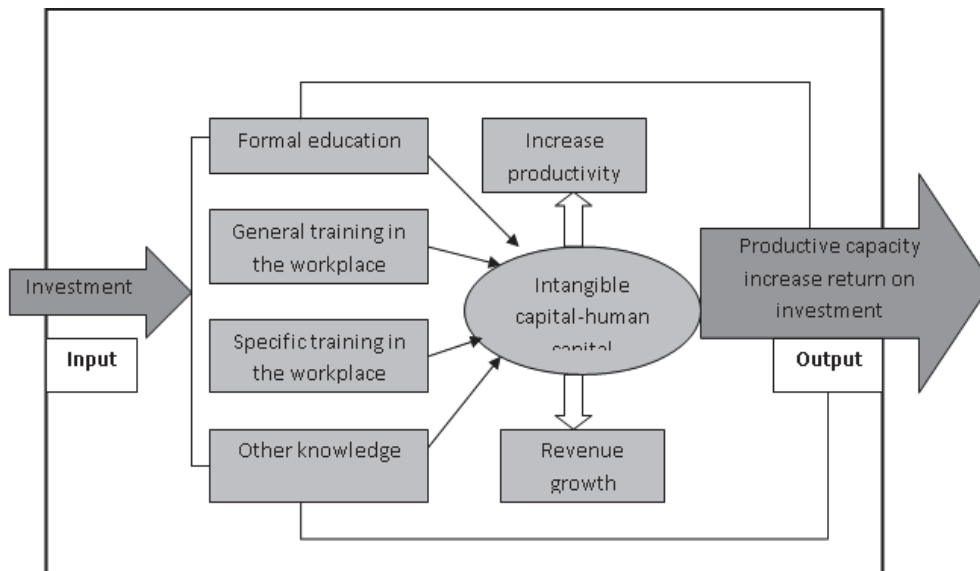


Figure 1: The human capital model

Source: Zula, K., Chermanck, T. (2007), Integrative Literature Review: Human Capital Planning: A Review of Literature and Implications for Human Resource Development. Human Resource Development Review, 6

The production resource took broader category is meant to include unutilized productive forces. So the human resource includes the population of working age not in employment as well. The human factor is more complex than both categories in which the economic and social side of the human body is intertwined.

2. Human capital components

Traditionally, human capital was regarded by education and experience, the latter being reflected both training and learning by doing, so education is the most important component of human capital. High educational capital requires a higher amount of labour due to increased productivity.

But in recent years, health (including the physical, cognitive function and mental health) has come to be seen as a fundamental component of human capital. In addition, the value of human capital is determined by the context of critical physical, social and economic fabric of society, because this particular context that determines how attributes that a person owns can be rewarded.

Education, training, healthcare, personal development activities are included in human capital, because they lead to improved health, increased incomes and causes lifelong learning (Becker, 1992) .

Human capital consists of resources or labour, capital, education and biological capital. Investments in health, education, talent and creativity in individuals as

providing a favourable environment in which these investments to be transformed into productivity for the economy are essential.

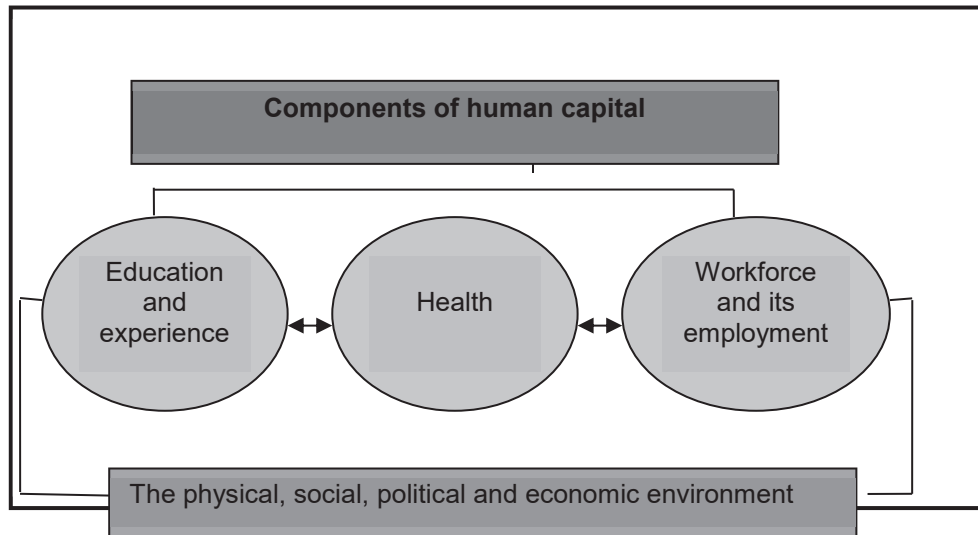


Figure 2: Human capital components
Source: edited according to OECD, 1996

In our century, the human factor has become one of the most important resource. As technology advances, it establishing and operating knowledge emerged from the factors of production increase the role of the human factor, above all, be seen by a unit value has growing resources and is able to move more and more production value can produce as before the production.

Human resource development is therefore plays an important role in an entity, a village, a region, a country's performance greatly affects the value established by the size of the observed area of development and development opportunities. The human talent, ability, wealth of the nation give reason to give more importance of this aspects.

3. The measurement of human capital development

A key factor in the growth of human capital, development differences result in polarization of the world. In developed countries, human assets and economic growth in areas faster than the smaller allocated human capacity. Human capital endowment measures the cost of all types of education and training a person receives. The human capital stock of an economy is made up of the human capital endowment of an average person multiplied by the number of individuals participating in the economy.

The human capital endowment referred to a sum of total investment in five types of human capital development, including not only formal education but also, quite prominently, informal education of both children and adults. Each component can be measured either in terms of direct expenditures or in terms of opportunity cost.

4. Human Development Index

The United Nations was first reported in 1990 in a publication entitled Human Development Report, which first published the human development index, with the aim of measurement and comparison of the world's 160 countries human development level. The method of calculation of the HDI due to the on-going debate and criticism since its release several times changed. The index's main advantage is that, unlike the previous one-dimensional approaches - because of the complex nature - is a realistic alternative to human development capture. Thanks to a simple structure and a relatively small data requirements is easily calculated for all countries in the world. In addition to the benefits listed in the index, however, it has been criticized for it.

The United Nations Development Programme publishes every year since 1990 the Human Development Index, with a view to the world countries in human development of the measure and compare. Human development means creating an environment in which people can develop their full resources, productively and creatively live in accordance with their needs. The human development level measuring index of drafting was the basic idea that the developed and developing countries - measured by gross domestic product - economic development by using a complex index of the human development level can be comparable. However, more an attempt was made to smaller regions to apply the indicators.

The method of calculation of the HDI - saw the light of day due to criticism - since the release of the index changed several times, the study of the current index calculation method is described, making reference to some of the major changes. For each component an index is calculated in the Human Development Index as follows:

$$I_i = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

Where: Xmax and Xmin showing the two extremes,

Xi is the i-th country's territorial integrity and instructions.

The World Economic Forum's Global Challenge Initiative on Employment, Skills and Human Capital analyses causes of unemployment and the skills gap, to anticipate future trends in labour markets and to identify successful practices and engage stakeholders in finding solutions.

The Human Capital Report generates the Human Capital Index. The Index quantifies how countries are developing and deploying their human capital and tracks progress over time. It takes a life-course approach to human capital, evaluating the levels of education, skills and employment available to people in five distinct age groups, starting from under 15s to the over 65s. The Index covers 124 countries, representing between them 92% of the world's people and 98% of

its GDP (WEF, Human Capital Report 2015). On the labour market of these days quantify human capital, set growth targets, investing in human capital is more than necessity. The human capital is the most important resource of a nation, which is the base of long term economic development.

The first edition of the World Economic Forum's Human Capital Report explored the factors contributing to the development of a healthy, educated and productive labor force. The second, revised edition attempts to deepen the analysis by focusing on a number of key issues and realize a better design of education policy and improved workforce planning.

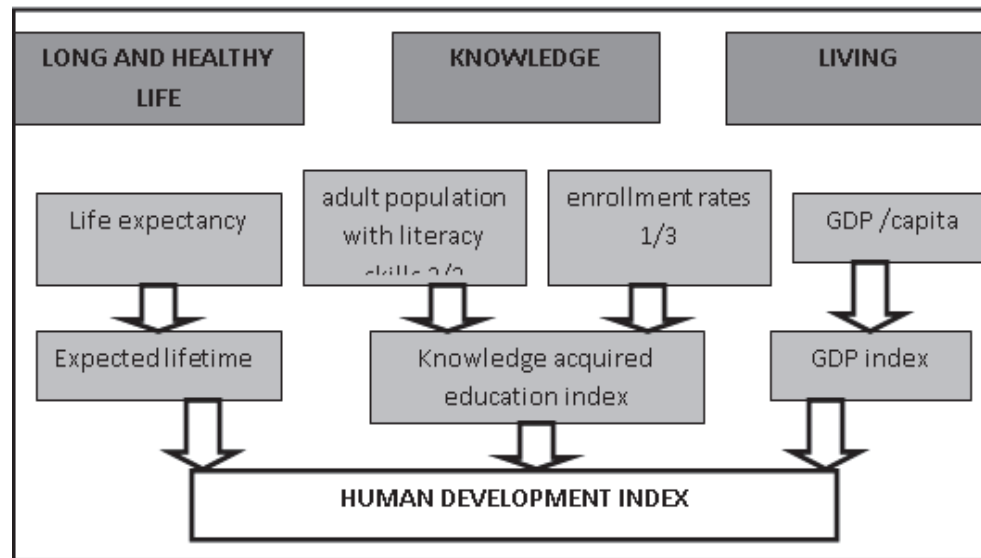


Figure 2: The Human Development Index Components
 Source: edited according to the Human Development Report, 2001.

Human capital is not a one-dimensional concept and can mean different things to different stakeholders. In the business world, human capital is the economic value of an employee's set of skills. The Human Capital Index contains two horizontal themes—Learning and Employment—running across five vertical age group pillars of the Index (Under 15; 15–24; 25–54; 55–64; and 65 and Over). In total, the Human Capital Index covers 46 indicators. Exactly half of these are the result of disaggregating by age education indicators (primary, secondary and tertiary attainment) and labour market indicators (labour force participation rate, unemployment rate and underemployment rate).

The first horizontal theme, Learning, contains several sub-themes related to education: enrolment in education and quality of education, which impact the future labour force; the educational attainment in the labour force; workplace learning—the level of opportunity in a country to acquire new skills both through formal on-the-job training as well as through learning-by-doing, tacit knowledge

and learning from colleagues. These sub-themes are distributed across the five age group pillars.

Human capital endowment measures the cost of all types of education and training a person receives. The human capital stock of an economy is made up of the human capital endowment of an average person multiplied by the number of individuals participating in the economy.

The human capital endowment referred to a sum of total investment in five types of human capital development, including not only formal education but also, quite prominently, informal education of children and adults. Each component can be measured either in terms of direct expenditures or in terms of opportunity cost.

5. In conclusion

The Human Capital Index reveals several trends and challenges in the current education, skills and jobs agenda and the future outlook for major economies. These developments imply that we need to rethink how the world's human capital endowment is invested in and leveraged for social and economic prosperity and the well-being of all. Similar to all global challenges in which our existing systems, structures and formal institutions no longer suffice, the world needs a new level of global cooperation on education, skills and jobs. Governments, business leaders, educational institutions and individuals must each understand the magnitude of the change underway and fundamentally rethink the global talent value chain. In order to be proactive in our response to both the current predicaments and a highly uncertain future, we must re-think what it means to learn, what it means to work and what is the role of various stakeholders in ensuring that people are able to fulfil their potential.

Many of today's education systems are disconnected from the skills needed to function in today's labour markets and the exponential rate of technological and economic change is further increasing the gap between education and labour markets. The premise of current education systems is on developing cognitive skills, yet behavioural and non-cognitive skills that nurture an individual's capacity to collaborate, innovate, self-direct and problem-solve are increasingly important. Current education systems are also time-compressed in a way that may not be suited to current or future labour markets. They force narrow career and expertise decisions in early youth. The lines between academia and the labour market may need to blur or disappear entirely as learning, R&D, knowledge-sharing, retraining and innovation take place simultaneously throughout the work life cycle, regardless of the job, level or industry.

Education delivery and financing mechanisms have gone through little change over the last decades. In many countries, many youth and children may find their paths constrained depending on the type of education they are able to afford, while others may not have access to even basic literacy and learning. On the other hand, many developed world education systems have made enormous increases in spending with little return. Early childhood education and teacher quality remain neglected areas in many developed and developing countries, despite their proven impact on learning outcomes; both areas also suffer from lack of objective, global

data. The emergence of potential disruptors is only just starting to open the space for re-imagining education delivery mechanisms.

Rapid demographic changes and the ability to forecast them offer a valuable opportunity for planning, while creating unprecedented pressures in markets and societies, and adapting to these changes requires a mind-set from policymakers that transcends political cycles. Ageing economies will face as more and more of their populations cross into the 65 and over age group and their workforces shrink further, necessity of a better integration of youth, female workers, migrants and older workers. Youth-bulge economies face burdens of a different kind as a very large cohort of the next generation-one that is more connected and globalized than ever before-enters the workforce and with very different aspirations, expectations and worldviews than their predecessors.

Human capital is one of the engines of development at social, community and individual levels. Hence, in the context of the investment of individuals in higher education is low, representing an act less frequently than in other countries, but also reduced in frequency across Romanian society focused on the development of educational capital is both an attitude of active adaptation oriented growth, but also a risky act. Educational capital, health and current revenues are strong interrelated, both at individual and aggregate level. Human capital and economic resources are in the same sphere of development, their levels are in largely interdependent.

Addressing the challenges of the current system requires a fundamental and holistic re-thinking of what it means to learn, to work and to fulfil one's potential as an individual, of how companies should plan for and invest in talent, of how education is delivered and what its substance and timing should be, and of how governments should be addressing not just today's short-term concerns but also planning now for the needs of tomorrow's generations. The Human Capital Index is among the set of tools that we hope will enable better decision-making in this direction.

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