

## **New Teaching Approaches in Human Capital Economics According Methods and Experiences of Yale University**

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### **Abstract**

New teaching methods in economics, established at the end of nineties at Yale University, were devoted to the study how to increase knowledge of students in the most important part of economy- Human Capital Approach. Human Capital approach is an economic methodology evaluating the nation's intangible capital according the health, environmental, institutional, educational properties, targeting to increase those using new methodologies of investing and insurance techniques. This approach answers the question: why nations are poor or rich! Improving ability of students at advanced Universities to discuss and model the basics of poverty and wealth of nations is an important step in bringing up new comprehensive thinking economists.

Especially the teaching methodology in Human Capital Economy underlies the impact, advantages and disadvantages of Globalization. During Globalization environmental, economical and ethical impacts on human's capital Status are planetary in scale and scope - disease pandemics and economic stagnation partly underpin state collapse and regional conflict. Almost the one sixth of humanity tries to escape health, environmental and economic degradation and conflict, straining against the borders of neighbors. The teaching methodology of Yale University, having considered the social, economic, environmental, and health issues of Globalization, developed special courses together with the classical methodology targeted to support students to analyze new rules and techniques combining the national and international economic and business policies.

New teaching methodologies in human capital economics relies on following research and teaching philosophies: Utilitarianism - it is an approach that allows us to judge a policy by its consequences. The economists used this approach turned it into cost-benefit analysis to determine which action is able produce the greatest utility

Liberalism – goes from the Philosopher - Immanuel Kant. It can be divided into following parts: a) Libertarianism- Libertarians believe that the rights guarantee freedom; b) Egalitarianism - Egalitarians believe that rights are nothing without resources. Communitarianism – as the key element is meant here the community as the ground for the public. Introducing Yale approaches in the study of Human Capital Economics Universities and high schools can increase ability to bring up more comprehensive thinking economists and businesspersons.

**Key words:** Globalization; Utilitarianism; Liberalism; Communitarianism.

### **1. Why we need human capital economics and economists**

It is fact that globalization has created a good base supporting economic growth in advanced industrial countries and especially in emerging countries of Asia. At the same time, polarization among income groups increased. Inequalities in incomes, health care and education having increased by globalization remain as a great risk for sustainable growth of economy in national and global levels.

Comparing the poorest and the richest countries according their assets of property, it is possible to see that the advanced industrial countries have much more intangible human capital – Health Status, Education and well organized public institutions than poor countries. The poorest countries are much more dependent on their natural capital than rich or middle income countries. If advanced industrial countries recreate more intangible capital based on advanced education, health care, creative innovations, happiness, humanism and other intangible goods, poor countries utilize only their natural capital – land, forest, row materials and others. Advanced industrial countries remain in leading

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positions only for their high valued intangible property, which can be entitled human capital. Poor developing countries facing great problems still have low educational capital, low health status, and high social risks shaking their political, economical, health and environmental stability. The human capital in most developing countries is still low or average, but remains unused, which supports the crisis and sometimes collapse of economy.

Developing countries, having great number of sickness days, can not be productive and competitive shrinking their Economic, Social and Health Care capacities not only in the present period but also in the future.

The common problem of our world is the great migration, which makes rich countries richer and poor countries poorer, because the policy of “brain drain” of “human capital flight” makes talented people to move to better places and opportunities. Without talented and educated people of country remains impossible.

Accordingly, well organized system of Human capital Development not only increases the intangible assets – education and Health Status of citizens but also it is the key, supporting economic, social development and environmental protection.

The great target to reduce the polarization among nations and among people makes economists to use their skills to increase human capital worldwide, especially in developing countries.

To support the rising power of human capital new type of economists are needed. Human capital economists must understand the nature of global changes, cross-cultural relations, different issues of humans, degree of influences of education and health on labor market development, the features of unemployment and sequencing environment.

To bring up economists supporting human capital development in both advanced industrial and developing countries most advanced Universities turned their educational and research programs into new types of economic disciplines – Economics of Education, Health, Family, Life, Environment, Ecology and Happiness.

The concept of Human Capital refers to the stock of productive skills and technical knowledge embodied in labor forces. Early economic theories refer Human Capital as one of the main factors of production and most precious commodity of human being. The term of “Human Capital” was first used and discussed by famous Economist Arthur Cecil Pigou, the opponent of the Great John Maynard Keynes.

In his work “A study in public Finance” Pigou had suggested to begin the investments into human capital as it is done in material capital. “There is such thing as investment in human capital as well as investment in material capital. So as soon as this is recognized, the distinction between economy in consumption and economy in investment becomes blurred. For, up to a point, consumption is investment in personal productive capacity. This is especially important in connection with children: to reduce undue expenditure on their consumption may greatly lower their efficiency in later-life. Even for adults, after we have descended a certain distance along the scale of wealth, so that we are beyond the region of luxuries and “unnecessary” comforts, a check to personal consumption is also a check to investment”. (Pigou “A Study in Public Finance” McMillan London 1928)

Human Capital underlies the unique characteristics of knowledge and the Health status of a person. Unlike determinants of physical labor capital knowledge is:

- Expandable, hence intellectual working persons get some training and gained experiences can increase their human capital.
- Transportable and transferable.

The concept of Human capital became more elastic in recent period. If old economists and especially Chicago School Economists, who had been trying to explain Human Capital in Wages and salaries, Yale economists have included immeasurable variables such as personal character, family, believe, fraternity, environment, health condition and knowledge, migration and economics of “brain drain”.

## **2. Human capital development and economic growth**

Human capital never been more critical to competitiveness and economic growth hence world has changed. Over the last 10 years we have witnessed a revolution in political and economic fields in business environment and workplaces. New countries come into existence. These new participants in our civilization want to be as successful as their powerful neighbors.

Human capital can be distinguished on two levels: country's level and corporation's level. Human capital development in both levels needs special management and investments. For company's human capital development we can use the following tools: people, brand, software, design, working methods and customer relationships. For countries human capital development we also begin our list of main instruments from people but continue with health status, education, environment, ecology, sustainable growth, fertility and others.

More influential for the growth of country's economy, it is especially important to understand the interrelations of human development and economic growth. To the extent that greater freedom and capabilities improve economic performance, human development will have an important effect of growth. Similarly, to the extent that increased incomes will increase the range of choices and capabilities enjoyed by households and governments, economic growth will enhance human development.

Economists in advanced western Universities and research centers had discovered what kind of impact has the growth on human development. Income growth clearly strikes one as the main contributor to directly increasing the capabilities of individuals and consequently the human development of nation since it encapsulates the economy's leadership on resources. For example, while the citizens of the west-Georgia have life expectancies and literacy rates comparable to those of many developed countries, the fact that they cannot enjoy many of the benefits of citizens of such countries demonstrates the importance of GDP as an instrument to achieving human developments. However, GDP also has a strong effect on literacy and health outcomes, both through private expenditures and government programs.

Using statistical parameters – life expectancy, literacy and GDP as components describing the level of Human Development UNDP has made first major attempt to estimate nation's human development. Publishing the Human Development Report this organization represented the true picture of nation's development. "Excessive preoccupation with GNP growth and national income accounts has... supplanted a focus on ends by an obsession with merely the means" (UNDP 1990).

Are these indicators, I mean GDP, life expectancy and others, enough to make the picture of nation's life today?

The impact of economic growth on nation's human development level, of course, also depends on other indicators of society. The important role has the distribution of income. In income distribution we must distinguish two levels: macro and micro level.

At the micro level we see that individual and household consumption can be an important element in increasing human development, and may respond more closely to the real needs of the population than do government programs. Individual consumption may not always increase the human capital and tend to human development.

Sometimes researchers discover a lot of interesting interrelations among national traditions and human developments.

From example in societies where women contribute more to family income and have more influence on household decision-making, expenditures on human development-oriented goods are likely to be relatively higher. The another survive being made in Georgia suggests that the larger the proportion of food under women's control, the larger households calorie consumption.

In the Philippines it has been discovered that consumption of calories and proteins increases with the share of income accruing directly to women (Garcia, 1990).

At a macro level, the distribution of the increased income from economic growth will also have a strong impact on human development. Since poorer households spend a higher proportion of their income on goods and services which directly promote better health and education, economic growth whose benefits are directed more towards the poor will have a greater impact on human development, via increased food expenditure as well as on education.

Scientists Birdsall, Ross, and Sabot (1995) discovered that if the distribution of income in Brazil were equal to that in Malaysia, school enrollments among poor children would be 40% higher.

To encourage Human Development and increase the Human Capital, government must identify priority sectors such as primary education and health that have the highest potential for Human Development. Government expenditures for Human development should be distributed predominantly to low income groups and areas since it is here that the highest marginal impact will be had. Government must have the institutional capacity to efficiently allocate these expenditures.

Research is very interesting on the human development influence on the economic growth.

Human development in turn has important effects on economic growth. If a central element of economic growth is allowing agents to discover and develop their comparative advantage, an increase the capabilities and functioning available to individuals should allow more of them to pursue occupations in which they are most productive.

We know that human development is necessarily correlated with human capital and human capital affects the economic growth of a nation: human development is bound to have an impact on economic growth.

Each component of human development is likely to have a distinct impact on economic growth. Education has a strong effect on labor productivity. In agriculture farmer's schooling is associated with an annual increase in output of 2-5%. Foster and Rosenzweig (1995) demonstrate that increased education is associated with faster technology adoption in the green revolution in India.

Statistical analysis of the clothing and engineering industries in Sri Lanka, to cite one example, showed that skill and education levels of workers and entrepreneurs were positively related to the rate of technical change of the firm.

The quantity and quality of investments together with the choice of technology and overall policy environment constitute other important determinants of economic performance. The quality of private entrepreneurs, of public policy-makers and of investment decisions generally, is bound to be influenced by the education of both officials and managers; moreover, the volume of both domestic and foreign investment and the rates of total factor productivity will undoubtedly be higher when a system's human capital level is higher.

Health has also demonstrates positive effects on economic growth beyond its inherent desirability as an end in itself. Professor of Yale University Hong Wang and associated professor Jennifer Rugger (2006) also Strauss and Thomas (1998) revive a large literature documenting how improvements in health and nutrition improve productivity and incomes.

Shultz (2000) has found correlations between height and income in his analysis of Brazil and Ghana survey.

Education and health may also have strong indirect impacts on economic growth through their effect on the distribution on income, and education even more so through its impact on health.

The researches made by Ranis, Stewart and Ramirez (2000) have found that good economic growth not accompanied by increases in human development may prove to be ultimately unsustainable. Human development may exhibit threshold effects in the sense that nations must attain a certain Human Development level before future economic growth becomes sustainable. If human development improvements are indeed a precondition for sustainable economic growth government policy and public funding may be necessary to move a nation above the human development threshold level.

Nations stuck in vicious cycles or low human development improvements that will lead to later economic growth. These fixed cost investments may include schools, hospitals and the necessary governance improvements to effectively implement investment projects.

The crucial lesson that emerges is that the old fashioned view of growth first and worry about human development later is not supported by the evidence. Improving levels of education and health should have priority, or at least move together with efforts to directly enhance growth.

### **3. New teaching methods are needed to increase the knowledge of economists and support development.**

New teaching methods in economics, established at the end of nineties at advanced Universities, were devoted to the study how to increase knowledge of students in the most important part of economics- Human Capital.

To teach the Human Capital approach, Professors usually use economic methodologies evaluating the degree of nation's intangible assets according the efficiencies of Education, Health Care, Environmental protection, and Institutional democracy.

In estimating the development of Human capital in different countries we can answer the question, why nations are poor or rich! During Globalization, environmental, economical, and ethical impacts on human's status are planetary in scale and scope - disease pandemics and economic stagnation underpin state collapse and regional conflict in part. Almost the one sixth of humanity tries to escape health, environmental and economic degradation and conflict, straining against the borders of neighbors.

Emphasizing that the social, economic, environmental, and health issues are becoming inherently global rather than purely national or domestic, the Human capital Economics must be targeted to research economics of Health Care, Education, Culture, Sport, Art, Family and others. Also must be studied the impacts of Educational and Health Care System reforms on a life processes, establish new rules and techniques combining the national and international human capital development policies, especially in developing countries, emphasizing impacts of Globalization.

The Yale experience of Human capital study involves the research of arguments in economics for government intervention in markets of Education and Health Care and reform models of resource allocation systems to suggest more appropriate:

- Type of financing;
  - Type of organization (insurance, freedom of choice, national health service);
  - Type of Health Policy;
  - Type of the Policy of Education;
  - Type of Labor Market;
  - Type of competition on different Health Care Markets (Managed Care-Managed Competition, Regulated Competition, Free competition, No Competition);

The teaching program of Human Capital Economy must be divided into two parts: a) The human capital at corporation and b) Human Capital in the country. According this, a part must involve the following topics: Human Capital Management in Corporation; Human capital Evaluation in Corporation, investments into Human Capital; Interrelations among Human capital growth and Income Growth.

At the country's level (b) improving ability of students to discuss, according the methodology of the evaluation of Human Capital the basics of poverty and wealth of nations can be the important step to bring up new economists and also to fight against poverty. Especially the teaching methodology in Human Capital Economy underlies the impacts, advantages and disadvantages of Globalization.

Students of economic faculties must work hard to guess the basics of poverty and wealth and discuss the following main issues and model possible solutions:

- a) How to create wealth using the allocation of tangible and intangible capital?

- b) How to measure the size and role of government to better allocate entrepreneurship and government programs;
- c) How to turn destructive politics into building ones and others.

To find solution of these issues, students, especially MA participants, must have comprehensive skills and knowledge.

They must attend courses in the following disciplines: a) Health Care Economics; b) Economics of Education; C) Economics of reforming; D) Economics of Culture and Sport.

The faculty of economics and economic related disciplines according the new teaching methodology in human capital economics involves also self-estimation and self-evaluation of teaching practice and teaching methodology using following methods:

Utilitarianism - it is an approach that allows us to judge a policy by its consequences. The economists used this approach turned it into cost-benefit analysis to determine which action is able to produce the greatest utility.

Graduated economists and Business Administrators, according their comprehensive knowledge, must gain measurable success, which is predictable in the middle phase of courses. According successes of post graduated persons, Universities also increase their image and revenues.

Liberalism – goes from the Philosopher - Immanuel Kant. It can be divided into following parts: a) Libertarianism- Libertarians believe that the rights guarantee freedom; b) Egalitarianism - Egalitarians believe that rights are nothing without resources.

Generally advanced American universities are full by the libertarian ideas but harmonization of Libertarian and Egalitarian principles are the best way to the success in results oriented education. Communitarianism – as the key element is meant here the community as the ground for the public. This principle must be used in the teaching, because the advanced University is the best place for scientific communes.

Introducing the approaches in the study of Human Capital Economy into the programs of MA by International Universities can increase the ability to bring to more comprehensive thinking economists and businessmen.

### **Conclusion and policy recommendations**

If human development improvements are indeed a precondition for sustainable economic growth, government policy and public funding may be necessary to move a nation above the human development threshold level. For Human Development, we need a new type of Economists, entitled as Human Capital Economists. The crucial lesson that emerges is that the old fashioned economic education must be replaced by new approaches. A rapidly changing world insists Universities to bring up more comprehensive thinking economists and business administrators. Students must bear the increasing programs. Universities must offer comprehensive economic knowledge in the economics of Education, Health Care, Culture, Sport, Art, Reforms, Family, Advantages and Disadvantages of Globalization and others.

Economic faculties and professors of economic related fields also in developed countries must use experiences of western Universities to raise the human capital of their students.

Making their programs more comprehensive and rich Georgian universities can be more productive and successful using approaches in Human Capital Economics.

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