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COMPARING LEVEL OF HUMAN DEVELOPMENT AMONG MACEDONIA, HIGHLY DEVELOPED COUNTRIES AND CENTRAL AND EASTERN EUROPEAN COUNTRIES - USING HDI

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Abstract

Basically, it could be concluded that by the end of the 1980s, the central issue of development was focused on the growth of income and not on the growth of quality of life. Therefore, the development strategies were oriented towards production and left no significant space for improving the welfare of individuals. In the beginning of the 1990s the human development concept emerged. According to this concept economic development ultimately should result in growth of *quality of life of individuals*, while the goal of the development process is to expand the capabilities of individuals by placing them in the focus of the efforts for development. Therefore, the quality of people's lives should not be evaluated on the basis of the average income level, but according to the people's capabilities to lead healthy lives, be educated, have self-respect and take active part in the social mainstreams. Human welfare growth is directly related to the freedom of choice. The increase of human capabilities leads to greater freedom in the people's choice, and thus they can compare a large number of options that lead to increased wellbeing. Consequently, we can refer to two key concepts: 1) the economic concept, and 2) the human development concept.

Keywords: *human development, highly developed countries, eastern Europe, Macedonia, economy*

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1. INTRODUCTION

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In the beginning of the 1990s the human development concept emerged. According to this concept economic development ultimately should result in growth of *quality of life of individuals*, while the goal of the development process is to expand the capabilities of individuals by placing them in the focus of the efforts for development. Therefore, the quality of people's lives should not be evaluated on the basis of the average income level, but according to the people's capabilities to lead healthy lives, be educated, have self-respect and take active part in the social mainstreams.

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1.1 Differences between economic and human development concept

The economic concept is closely related to the investments in the human capital which are mostly gained through education and on-the-job training.[2] According to this concept, investment in human capital is important due to the fact that individuals are viewed from two perspectives - 1) consumers of goods and services and 2) producers of goods and services. As consumers they determine the future production of the economy and consequently the character and the tempo of the economic

[2] Human capital is defined as a sum of production skills, talent and knowledge of the individual.

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development[3], while as producers they have a direct influence on the level of the future output.[4] Thus the economic concept puts an emphasis on the future production capacity (human capital) of individuals and their contribution in generating income at macro and micro economic level.

Since much private and public expenditure are designed to increase the future production capacity (human capital) of individuals, it is of great importance to allocate funds in areas which gains the highest positive contribution. In this respect, the role of the state is very important.

Human development has been defined as a process of expanding the human choice – with respect to the capabilities (opportunities) for a human being to have a long and healthy life, to be better educated and to have a decent standard of living. Surely, the human beings' choice is not exhausted with the above mentioned components. Particularly important are other "supplemental" components, such as: political freedom, guaranteed human rights, human safety, etc., which for their part exert constant pressure for supplementing and upgrading the concept.

In the broader sense, the concept of human development could be defined as development of the people, development for the people and development from the people (Human Development Report, 1993: 3).

The development of the people is directly related to the human capital investments,

i.e. investments in the formal education, training, health care, as well as anything which directly or indirectly contributes to the enhanced productivity and creativity of an individual.

The development for the people on the other hand is related to the benefit distribution. It shows whether and to what extent the economic development, the generator of which is the human beings themselves, is equally distributed among the individuals. Unequal distribution of the economic growth would ultimately mean unequal distribution of the human beings' quality of life.

[3] Regarding the relation between the level of human capital and economic development see in: Temple Jonathan, (1998): A Positive Effect of Human Capital on Growth, Hertford College, Oxford; Temple Jonathan, (1999): The New Growth Evidence, Journal of Economic Literature.

[4] For more details regarding this see in: Dimitar Eftimoski (2003): Economics of Development, Institute of Economics - Skopje, Skopje, pp. 20-25.

The development from the people is the last component of the broader definition of the human development concept. It is directly related to creating opportunities for people's active participation in the creation of their own development. As a matter of fact, the strategies of sustainable human development too, put the emphasis on generating productive jobs. For a long period of time there was a prevailing belief in the economic literature that stimulating economic growth through increased real GDP, would inevitably lead to increased employment rate. But, practice showed something different. Namely, research conducted in both underdeveloped and developed countries proved that increased output is not always accompanied by corresponding increase in the employment rate. In relation to the economic growth, the employment rate is either unchanging or rising less proportionately. This practically means that modern economies are facing a new phenomenon – economic growth followed by low employment rate – jobless growth (Human Development Report, 1993: 3).

The human development should be understood as the primary (ultimate) goal of the economic development, while at the same time the most efficient means of promoting economic development.

In the first instance (as the ultimate goal of the economic development), human development means improvement and enrichment of the human life. Here, it should be completely clear that the development's main goal is not production of as many goods and services as possible, but rather strengthening of the human capabilities for a fulfilled, productive and dignified life (Griffin and McKinley, 1994: 1-10).

In the second case (as means of economic development), the human development stands for the main drive of the economic development. Through the process of human capital accumulation, it enhances people's skills, knowledge, productivity and inventiveness. Thus, the economic development "profits" from the human development.

In this context, it is an indisputable fact that the real GDP growth, or increased income and employment rate, are important development components. Nevertheless, clear distinction should be made between the development goal and the means of its promotion. Income and employment rate are not development goals, but means of raising the existing level of development. The basic goal of development is to increase the human capabilities and the range of human choices. Income is merely a part of the human choice. Human choice, beside the income, implies advancement of the human

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health, creative life in an affluent and healthy natural environment, democratic civil society, etc.

Frequently, a prevailing conclusion is that the income itself is the solution for improved human choice, i.e. that the income is the only and most efficient solution (means) for increased number of options – opportunities for people. However, this opinion is only partly true. Research shows that there is no automatic relation between increased income and human development (Human Development Report, 1990: 10). Simply said, it may happen for the income per capita to grow, while the effects of such growth do not reach the "ordinary people". Experience shows that there are cases of a country with high level of human development and moderate level of income per capita, and the opposite, a country with low level of human development and high level of income per capita.[5]

2. Measuring human development - Human Development Index (HDI)

Human development index is based on three components (the life expectancy, the achieved education and the living standard) and is not exclusively focused on the economic wealth - as the case may be with the GNP (Jahan, 2002).

The first component - *life expectancy* is measured by the expected length of the persons from birth. The second component - *the achieved education* is measured through two variables: *Adult literacy rate* and the *gross enrollment rate for all three educational levels* (primary, secondary and tertiary), i.e. through the synthetic measurement of the achieved education (E):

$$E = a1\ P + a2\ G$$

where: $a_1 = \frac{2}{3}$ and $a_2 = \frac{1}{3}$ are parameters for the literacy of the adults (P) and the enrolled students at the all three levels of education (G), respectively. The third component - *the living standard* is measured through the real gross domestic product (GDP) per capita (PPP$).

Human Development Index estimation is carried out in three consecutive phases, where: *The first phase* reveals which of the three above-mentioned components: live

[5] See: Human Development Report (2005), UNDP, pp.220-222.

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expectancy at birth (X_1), achieved education (X_2) and real GDP per capita (X_3) is scarce in the relevant country. For estimation of component indexes the following equitation is used:

$$I_{ij} = \frac{(X_{ij} - \min_j X_j)}{(\max_j X_{ij} - \min_j X_{ij})}$$

where: Index I_{ij} is scare indicator for j – country in regard to i - variable, whereas, maximal and minimal component values are standardized and fixed for all countries:

Life expectancy at birth:	25 – 85 years
Adult literacy rate:	0% - 100%
Combined primary, secondary and tertiary gross enrolment ratio (%):	0 - 100
GDP per capita (PPP):	US$ 100 – US$ 40,000

Scarcity of a particular component sets the country in rang 0-1. Third component index estimation – income, is carried out with the equitation:

$$W(y) = \frac{\log y - \log y_{\min}}{\log y_{\max} - \log y_{\min}}.$$

In the second phase scarcity Index (I_j) is determined:

$$I_j = \sum_{i=1}^{3} I_{ij}.$$

In the third phase Human Development Index (HDI) is count:

$$HDI = \frac{1}{3} I_j$$

Therefore, we can conclude that the HDI is an indicator of the average achievements in the field of basic human capabilities (human development). But, one has to take into account its deficiencies as well, such as the incapacity to reflect the distributive effects of the development (the inequality) and to measure the deprivations aspects of the development.[6]

[6] Moreover, according to Amartya Sen (Sen, 2000: 17-24) it is important to distinguish between the use of HDI as an index and the overall concept of human development. Namely, we should be clear about the fact that there are many relevant variables of the human development that are not included in the HDI.

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3. Comparison

With the HDI amounting to 0.793, Macedonia belongs to the group of countries with a middle human development level.[7] According to the level of the HDI, Macedonia is number 60 world ranking out of a total of 175 countries (See Table 2)[8].

Table 1. Components required for the calculation of HDI for Macedonia

Life expectancy	Adult literacy rate (%)	Gross enrollment rate for all three educational levels	Real GDP per capita (**PPP** $)
73.05	96.0	70.0	6.470

Source: State Statistical Office

Table 2. Human Development Index (HDI) for Macedonia

Life expectancy index	Completed education Index	Adjusted GDP per capita Index (**PPP$**)	HDI
0.810	0.870	0.700	0.793

Source: Our own calculations made on the basis of data from State Statistical Office

High HDI in the countries stemming from the former so-called socialist block and Former Yugoslavia (See the latest HDR, UNDP 2005) should not be surprising. We can openly sum up that in the past, these countries built up a real strong social component on the account of low economic efficiency, which today reveals throughout human development indexes. According to the World Human Development Report - 2005, in the group of countries with the highest human development level are listed even nine former socialist countries (Slovenia, The Czech Republic, Slovakia, Hungary, Poland, Estonia, Croatia, Lithuania, Latvia), whereas the others are mainly listed on the upper middle level of human development (Bulgaria, Russia, Romania, Macedonia and etc.).

The HDI in Macedonia - 0.793, significantly differs from the average HDI of the highly developed countries - 0.911 (See Chart 1):

[7] According to the UNDP methodology, countries are divided in three groups depending on the height of the human development index, as follows:

- Countries with high human development - over 0.800 HDI,
- Countries with middle human development - from 0.500 to 0.800 HDI,
- Countries with low human development - below 0.500 HDI.

[8] The Macedonia's HDI confirms the hypothesis that there is no automatic link between the growth of the real income per capita (economic growth) and the level of HDI (human development). The disparities between these two components mainly result from the inequality in the distribution of the benefits, i.e. in what way and how successfully the generated income is converted into human development. For more details regarding this see in Dimitar Etimoski (2004), "Human Development, Inequality and Poverty in Republic of Macedonia in Transition Period", *Global Scholarly Publications*, New York.

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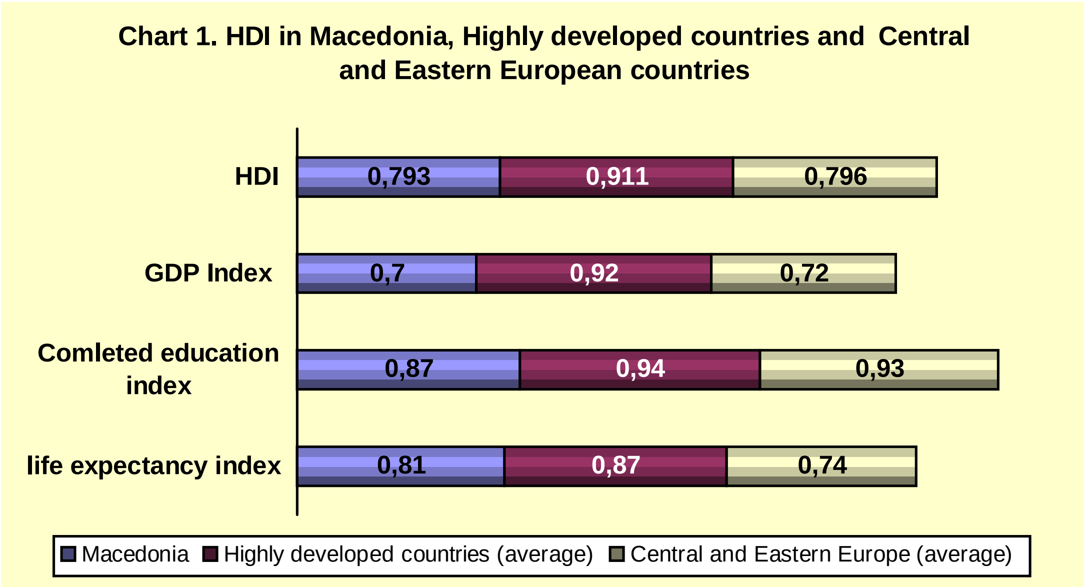
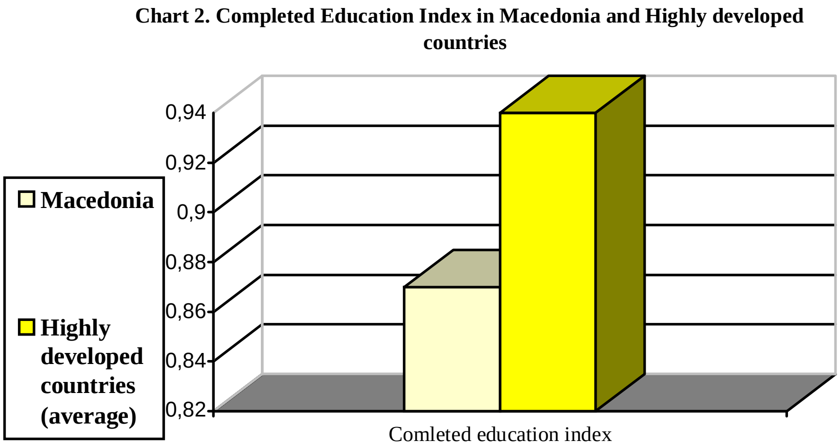


Source: Human Development Report, 2005 and NHDR - Macedonia 2004

This difference is especially significant in the "knowledge index", where the value of completed education index reaches 0.870 and 0.940, respectively. The gross rate of enrollment at all the three levels of education in Macedonia is 70%, while in the highly developed countries - 87%.

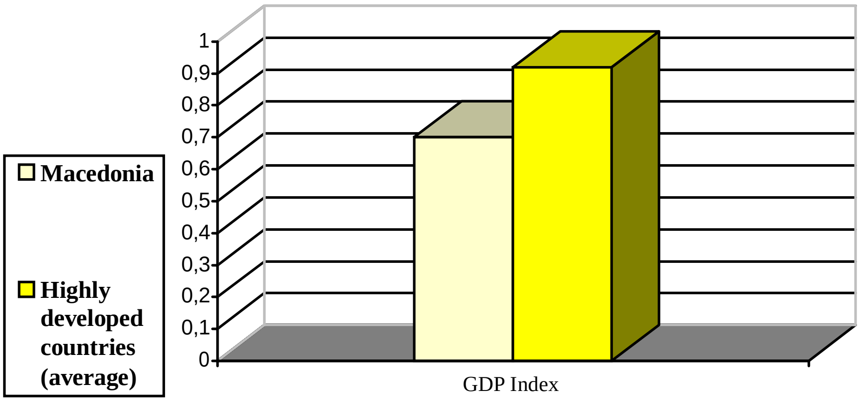


Source: Human Development Report, 2005 and NHDR - Macedonia 2004

In addition, the income component, respectively the real GDP per capita (PPP), indicates great differences between Macedonia and highly developed countries. The real GDP index in Macedonia is 0.700, compared with the highly developed countries where it is 0.920. The average real GDP per capita in Macedonia (6.470 US$) is approximately 18.400 US$ lower than the one in the highly developed countries

(24.904 US$), which is to a great extend depressing the value of the Macedonian human development index.

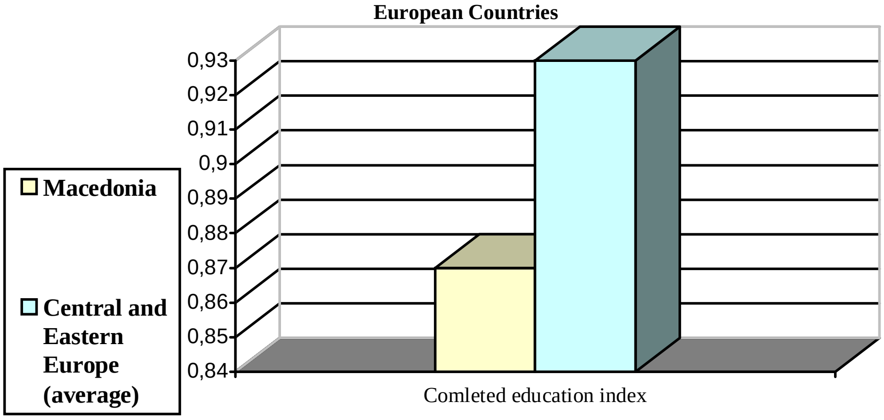
Chart 3. GDP Index in Macedonia and Highly developed countries



Source: Human Development Report, 2005 and NHDR - Macedonia 2004

Regarding the averages of HDI composite indexes of Central and Eastern European countries, Macedonia mainly shows satisfactory results, except in the component of acquired education, which relates to the importance of investments in human capital for the quality of life of the Macedonian population.

Chart 4. Completed education index in Macedonia and Central and Eastern European Countries



Source: Human Development Report, 2005 and NHDR - Macedonia 2004

The HDI in Macedonia (0.793) is significantly differs from the average HDI of the EU member countries (0.907), too. The differences are rather significant in the two previous mentioned components - income and knowledge (See Table 3).

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Table 3. Disaggregated HDI for the full EU Member Countries and Macedonia

Country	Life expectancy index	Education index	GDP index	HDI
Austria	0.90	0.96	0.95	0.936
Belgium	0.90	0.99	0.94	0.945
Cyprus	0.89	0.91	0.87	0.891
Czech Republic	0.84	0.93	0.85	0.874
Denmark	0.87	0.99	0.96	0.941
Estonia	0.77	0.97	0.82	0.853
Finland	0.89	0.99	0.94	0.941
France	0.91	0.97	0.94	0.938
Germany	0.90	0.96	0.94	0.930
Greece	0.89	0.97	0.88	0.912
Hungary	0.80	0.96	0.83	0.862
Ireland (Republic of)	0.88	0.97	0.99	0.946
Italy	0.92	0.95	0.94	0.934
Latvia	0.78	0.96	0.77	0.836
Lithuania	0.79	0.97	0.79	0.852
Luxembourg	0.89	0.95	1.00	0.949
Malta	0.89	0.85	0.86	0.867
Netherlands	0.89	0.99	0.95	0.943
Poland	0.82	0.96	0.79	0.858
Portugal	0.87	0.97	0.87	0.904
Slovakia	0.82	0.91	0.82	0.849
Slovenia	0.86	0.98	0.88	0.904
Spain	0.91	0.97	0.90	0.928
Sweden	0.92	0.99	0.93	0.949
United Kingdom	0.89	0.99	0.94	0.939
Macedonia	0.81	0.87	0.70	0.793

Source: Human Development Report 2005, UNPD

4. Concluding remarks

The economic instability which emerged immediately after the independence of Macedonia, primarily as a result of the price liberalization and foreign trade, was neutralized within a short period of time with conventional economic measures which in their essence carried the policy of restrictiveness of the aggregate demand. The restrictive monetary and fiscal policy, in combination with the wage policy and limited banking placements contributed to partial macroeconomic equilibrium (equilibrium on the money market, but not on the integral market). At the same time it contributed to a decreasing of the living standard of the population and in an increase in the unemployment rate. This economic policy has not undergone any significant changes for a decade (see Chart 5).

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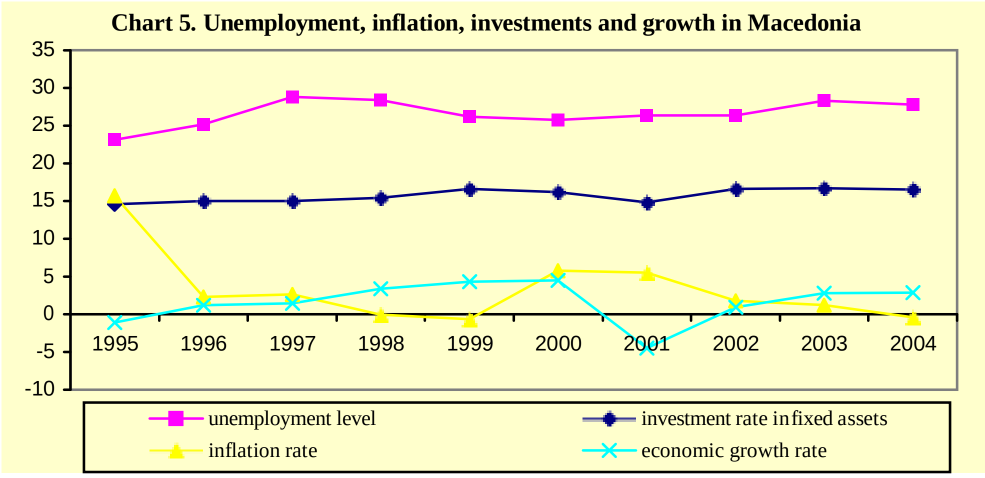

Source: State Statistical Office

Chart 5 shows that as a result of the policy of restrictions of the aggregate demand (which is basically a well-known policy of IMF and the World Bank) low inflation rate is accompanied by high levels of unemployment what is directly related to the stagnation of the investment activities. Simply saying, the low consumption of the public sector, enterprise sector and the household sector, which are result of a low budget deficit (low capital investments), high interest rates and still "frozen" wages in the public administration, which absorbs a great part of the labor force in the country, accompanied with the high poverty and inequality, are forcing the economy into the trap of equilibrium at a low level of output and a high level of unemployment.

It is striking that macroeconomic policy makers turn their attention more to the monetary (financial) sector, than to the real sector of the economy. Excessive hopes and energy have been invested in the expectations that the monetary sector of a small and poor economy, such as the Macedonian, will manage to stimulate growth of the real GDP per capita.

In essence, policy seems to be founded on the component of stabilization rather than development, so the efforts to initiate the growth of the real GDP per capita exclusively through the monetary component appear to be unrealistic.

Monetary stability is not the ultimate goal of the development process, but a means to achieve the basic goal – economic and human development. Therefore, the macroeconomic policy of stabilization should not be understood as a synonym of the macroeconomic development policy.

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There is a general conclusion that thus far, the transition has failed to produce the expected positive effects. On the contrary, the economic efficiency of the system is weakening and the social security and the quality of life of the population is still deteriorating.

Human development index (HDI) for Macedonia, as a measure of the average achievements in the field of human development, counts 0793, which ranks Macedonia number 60 out of a total of 175 countries in the World. It significantly differs from the average HDI of the highly developed countries - 0.911 and EU member countries - 0.907, which can not be said about the Central and Eastern European countries.

Finally, there is no automatic link between the growth of the real income per capita (economic growth) and the growth of the HDI (human development), which according to our opinion is mainly result of the inequality in the distribution of the benefits among the population.

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