Measuring quality of life in Macedonia - using human development indicators

Dimitar Eftimoski

Abstract

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, stressing that economic development ultimately should result in growth of quality of life of individuals, while the goal of the development process was to expand the capabilities of individuals by placing them in the focus of the efforts for development.

This paper is focused on the quality of life of the individuals. Moreover, in addition to the previous practice in Macedonia of calculating the human development index (HDI) - as a measure of quality of life, an attempt will be made to calculate the human poverty index (HPI-2) - as a measure of non-income poverty, gender development index (GDI) - as a measure of inequality between men and women, as well as the human development index at the level of aggregated urban and rural municipalities.

We hope that it will contribute to the improvement of the quality of decisions made by the state and local authorities in Macedonia when it comes to issues concerning the human development.

Key words: human development, economic development, human poverty, gender development, quality of life.

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1. Introduction

Immediately after independency of Macedonia, liberalization of foreign trade and price liberalization policy affected economic instability. Furthermore, restrictive macroeconomic policy was adopted (restriction on aggregate demand). Restrictive monetary and fiscal policy, applied together with wage policy and limited banking placements, resulted in decrease of population living standard.

Poverty measures estimated on the basis of parameterized quadratic Lorence curve are extremely high. Head count index (H) shows that 33.54% of the total population is under the poverty line, estimated on the level of 70% of the average household income (179,089.00 denars, or about US$ 240 per month). Poverty gap index (PG) which counts 11.17%, shows average proportional income shortage of the total population, or overall income shortage by which the poor could reach the poverty line, whereas Foster-Greer-Thorbecke measure of second class (FGT2) counting 5.18%, shows variation (change) in the income of the poorest households (Eftimoski, 2004). The Gini coefficient which is the most common used measure of inequality, counts 29.93% (Eftimoski, 2004). According to the World Bank research, in the beginning of the transition period, this coefficient was 22% (NHDR - Macedonia, 1998: 58).

Low growth rate of the real GDP per capita (see Chart 1) could not improve people’s quality of life - human development, so both inequality and poverty trends are still increasing.

2. On the concept of human development

Human beings, or rather identifying alternatives for the advancement of their welfare have been the primary subject of research in the economic science since its early beginnings.

“...Indeed, a belief in the central importance of enriching the lives and freedoms of ordinary human beings has been a foundational concern in the social sciences for very long time. This applies not only Adam Smith, but also - much earlier - to the pioneering exploration of political economy in the 17th century by Sir William Petty. Petty’s classic monograph Political Arithmetic.....was clearly motivated by an interest in the lives of human beings in a way that is not all that removed from the contemporary interest in human development...” (Amartya Sen)

In time, the subject of research has transferred from human beings to production. Increased production became an obsession for the economists, while the interest in the human beings’ quality of life increasingly declined.
As a kind of response to such tendencies, the concept of human development emerged in 1990-es. This concept very clearly defined the basic goal of the development – the human being, i.e. improvement of his quality of life.

One must have in mind that the human development concept has incredibly strong background in the history of economic thought. Doubtless, its roots can be found in the wellbeing theory, as well as in the Basic Needs concept. However, it was the Amartya Sen’s theory of development on capabilities and functionings that provided the strong conceptual foundations for HD concept.

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.

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

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2 Promoted by Paul Streeten and Frances Stewart
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 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 (see Table 1 and 2).
Table 1: Different levels of real per capita GDP, with approximately equal HDI

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>9.170</td>
<td>0.818</td>
</tr>
<tr>
<td>Poland</td>
<td>9.450</td>
<td>0.841</td>
</tr>
<tr>
<td>Estonia</td>
<td>10.170</td>
<td>0.833</td>
</tr>
<tr>
<td>Lithuania</td>
<td>8.470</td>
<td>0.824</td>
</tr>
<tr>
<td>Uruguay</td>
<td>8.400</td>
<td>0.834</td>
</tr>
<tr>
<td>Chile</td>
<td>9.190</td>
<td>0.831</td>
</tr>
<tr>
<td>Kuwait</td>
<td>18.700</td>
<td>0.820</td>
</tr>
<tr>
<td>Qatar</td>
<td>19.844</td>
<td>0.826</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>20.530</td>
<td>0.816</td>
</tr>
</tbody>
</table>

Source: Human Development Report (2005), UNDP.

Table 2: High real per capita GDP with high HDI

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>27.130</td>
<td>0.937</td>
</tr>
<tr>
<td>Norway</td>
<td>29.620</td>
<td>0.944</td>
</tr>
<tr>
<td>USA</td>
<td>34.420</td>
<td>0.937</td>
</tr>
<tr>
<td>Australia</td>
<td>25.370</td>
<td>0.939</td>
</tr>
<tr>
<td>Iceland</td>
<td>29.990</td>
<td>0.942</td>
</tr>
<tr>
<td>Sweden</td>
<td>24.180</td>
<td>0.941</td>
</tr>
<tr>
<td>Belgium</td>
<td>25.520</td>
<td>0.937</td>
</tr>
</tbody>
</table>

Source: Human Development Report (2005), UNDP.
The absence of an automatic relation between the income and human development may be explained by the incompatibility of the proportion of human capital per capita with respect to the income per capita in the economy. Namely, it was a frequent case (this especially applies to the ex-socialist countries) in some past period of time for a country to invest unselfishly in the human capital of its population, but for a variety of reasons (the transition period) the proportion of income per capita remained low, i.e. the growth rate of the income per capita was lower than the growth rate of human capital per capita. In such cases, the potential income per capita is practically at a higher level than the amount of the real income per capita, i.e. the economy, with the existing human capital stock, can achieve a higher level of income than it actually achieves. As a result, the human development of the respective country is at a higher level than the level of the real income per capita. (see Table 1 – Poland and Estonia).

The absence of an automatic relation between the income and human development should not be understood as a rule which unambiguously points out that the income does not contribute to an increased level of human development. On the contrary, increased income contributes enormously to the human development, but it would be wrong to link the entire human development to the income (GDP) increase in an economy. There are two reasons for this, as follows:

1) Income accumulation has decisive influence on the fulfillment, or accomplishment of some options (choices) of a human being, or the society as a whole. Thus for example, a society does not necessarily have to be rich to be democratic, or a family need not be rich to respect the dignity and rights of each member.

2) The human choices reach much further than the economic wellbeing. Namely, people want to have a healthy and long life, to be better educated, to live in a healthy and clean natural environment, to enjoy the safety of their homes, workplace and society, which is of course considerably, if not completely, beyond the “range” of income.

Let us summarize. Until the emergence of the human development concept, the central issue of development was focused on the income increase, and not the people’s quality of living. Consequently, the development strategies were production oriented and did not leave enough room for people’s wellbeing improvement. 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.
3. The human development level in Macedonia (situation and trends)

Before moving to the analysis of the human development level in Macedonia, it is important once again to bear in mind that it is a frequent phenomenon to have the growth of the real income per capita, with the effects of such growth failing to reach the people, or the opposite case, when the human development index is growing and real income per capita decreasing or stagnating – as is the case with the Macedonia. Certainly, there are examples where the growth of the real income per capita is accompanied with an appropriate increase in the human development level (Fukuda Parr at. al., 2002 and Stewart, 2002).

3.1. Human development index - HDI

The human development index is an indicator of the average achievements in the field of basic human capabilities (human development). 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. 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.

Human development index\(^3\) 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).

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\(^3\) 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):

\[
E = a_1 P + a_2 G; \text{ where } a_1 = 2/3 \text{ and } a_2 = 1/3 \text{ are parameters for the literacy of the adults (P) and the enrolled students at the all three levels of education (G), respectively.}
\]

The third component - the living standard is measured through the real gross domestic product (GDP) per capita (PPPS).

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

\[
I_{ij} = \frac{(X_j - \min X_{ij})}{(\max X_{ij} - \min X_{ij})}
\]

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

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The HDI for the Republic of Macedonia was calculated according to the 1999 modified methodology by Sudhir Anand and Amartya Sen (Sen and Anand, 1999).

Table 3: Components required for the calculation of HDI for Macedonia

<table>
<thead>
<tr>
<th>Life expectancy</th>
<th>Adult literacy rate (%)</th>
<th>Gross enrollment rate for all three educational levels</th>
<th>Real GDP per capita (PPP $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.05</td>
<td>96.0</td>
<td>70.0</td>
<td>6.470</td>
</tr>
</tbody>
</table>


With the HDI amounting to 0.793, Macedonia belongs to the group of countries with a middle human development level. According to the level of the HDI, Macedonia is number 60 world ranking out of a total of 175 countries (See Table 4).

Table 4: Human Development Index (HDI) for Macedonia

<table>
<thead>
<tr>
<th>Life expectancy index</th>
<th>Completed education Index</th>
<th>Adjusted GDP per capita Index (PPPS)</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.810</td>
<td>0.870</td>
<td>0.700</td>
<td>0.793</td>
</tr>
</tbody>
</table>

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 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,

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

\[ W(y) = \frac{\log y - \log y_{mn}}{\log y_{max} - \log y_{min}}. \]

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

\[ I_j = \sum_{i=0}^{n} I_{ij} \]

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

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4 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.
Lithuania, Latvia), whereas the others are mainly listed on the upper middle level of human development (Bulgaria, Russia, Romania, Macedonia and etc.).

Chart 1. Dynamics of HDI and GDP per capita in Macedonia

![Graph showing the dynamics of HDI and GDP per capita in Macedonia.](image)

Source: State Statistical Office and our own estimates,

The Macedonia’s HDI further 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) (see Graph 1). 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. We say that the economic growth is successfully converted into quality of living if it generates higher level of employment, provides greater security of the population, makes possible for more equal distribution of income, makes possible for development of democracy and enchases human rights and freedoms.

The HDI in Macedonia - 0.793, significantly differs from the average HDI of the highly developed countries - 0.911 (see Chart 4). 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%.

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.
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.

Chart 2. Comparison of HDI with Highly developed countries and the countries of Central and Eastern Europe

![Chart](chart.png)


3.2. HDI in urban and rural municipalities

The disaggregated human development indices are of particular importance for the assessment of the disparities among the municipalities (Fukuda Parr at. al., 2002).

The human development level in rural and urban municipalities in Macedonia is shown in Tables 5 and 6:

Table 5: Components required for the calculation of the HDI per type of the municipality

<table>
<thead>
<tr>
<th>Type of municipality</th>
<th>Life expectancy</th>
<th>Adult literacy rate (%)</th>
<th>Gross enrolment rate for all three education levels</th>
<th>Real GDP per capita (PPP $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>73.05</td>
<td>94.81</td>
<td>78.52</td>
<td>6.418</td>
</tr>
<tr>
<td>Rural</td>
<td>73.05</td>
<td>90.63</td>
<td>62.36</td>
<td>5.926</td>
</tr>
</tbody>
</table>

Source: State Statistical Office
Table 6: Human Development Index (HDI) per type of municipality

<table>
<thead>
<tr>
<th>Type of municipality</th>
<th>Life expectancy index</th>
<th>Completed education index</th>
<th>Index of adjusted real GDP per capita (PPPS$)</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>0.800</td>
<td>0.890</td>
<td>0.690</td>
<td>0.796</td>
</tr>
<tr>
<td>Rural</td>
<td>0.800</td>
<td>0.810</td>
<td>0.680</td>
<td>0.765</td>
</tr>
</tbody>
</table>

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

The HDI differs significantly between urban (0.796) and rural municipalities (0.765). This difference is particularly dramatic in respect of the knowledge component, where the completed education index in the urban and rural municipalities reaches 0.890 and 0.810 respectively. The gross enrolment rate for all three education levels in the rural municipalities amounts to 62.36% and is significantly lower than the one in the urban municipalities - 78.52%.

3.3. Gender inequality: Gender development index - GDI

While the HDI measures the average achievements, the GDI makes an adjustment of the average achievements and shows the inequality between women and men in terms of health (life expectancy), knowledge (literacy rate and gross enrollment rate) and the living standard (estimate of the generated income).  

Table 7: Components required for the calculation of the GDI for Macedonia - 2002

<table>
<thead>
<tr>
<th>Life expectancy (women)</th>
<th>Life expectancy (men)</th>
<th>Adult literacy rate (%) (women)</th>
<th>Adult literacy rate (men)</th>
<th>Gross enrolment rate for all three education levels (women)</th>
<th>Gross enrolment rate for all three education levels - (men)</th>
<th>Estimate of the generated income - women (PPPS)</th>
<th>Estimate of the generated income - men (PPPS)</th>
<th>Share in the overall population (women)</th>
<th>Share in the overall population (men)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75.21</td>
<td>70.68</td>
<td>92.95</td>
<td>97.10</td>
<td>68.71</td>
<td>72.09</td>
<td>4350</td>
<td>8600</td>
<td>0.497</td>
<td>0.503</td>
</tr>
</tbody>
</table>

Source: State Statistical Office and our own estimates


Estimate
Table 8: GDI for Macedonia

<table>
<thead>
<tr>
<th>Life expectancy index (men)</th>
<th>GDI</th>
<th>Life expectancy index (women)</th>
<th>Completed education index (men)</th>
<th>Completed education index (women)</th>
<th>Revenues index (men)</th>
<th>Revenues index (women)</th>
<th>Index of equally distributed life expectancy</th>
<th>Index of equally distributed education</th>
<th>Index of equally distributed revenue</th>
<th>GDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.795</td>
<td></td>
<td>0.803</td>
<td>0.849</td>
<td>0.888</td>
<td>0.630</td>
<td>0.743</td>
<td>0.799</td>
<td>0.868</td>
<td>0.682</td>
<td>0.783</td>
</tr>
</tbody>
</table>

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

The GDI in Macedonia stands at 0.783 and puts Macedonia in the middle of the ranking list – close to Croatia (0.800) and Bulgaria (0.794). The GDI in the case of Macedonia shows moderate disparities, i.e. moderate gender inequality. The inequality is best reflected in the revenues generated by men and women (Index 0.682), whereas the other forms of inequality fall within the limits of what is a desired situation.\(^8\)

According to the UNDP methodology, the GDI of 0.783 puts Macedonia in number 59 world ranking out of a total of 175 countries.

### 3.4. Multidimensional poverty: Human poverty index - HPI-2

Income (monetary) poverty is an important, but not the exclusive dimension (component) of poverty. Poverty is a multidimensional and complex phenomenon, which in essence is about the lack of possibilities and opportunities necessary for human development (education, health care and decent standard of living).

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\[^7\] The calculation involves three steps. First, female and male indices (Table 8 - columns 1 to 6) in each dimension (see: Table 7) are calculated using equation: $\text{Dimension index} = \frac{\text{actual value} - \text{min value}}{\text{max value} - \text{min value}}$.

Second, the female and male indices in each dimension are combined in a way that penalizes differences in achievements between men and women. The resulting index, referred to as the equally distributed index, is calculated according to this equation:

$\text{Equally distributed index} = \left[ \left( \frac{\text{female population share} \times (\text{female index} - 1)}{1 - \varepsilon} \right) + \left( \frac{\text{male population share} \times (\text{male index} - 1)}{1 - \varepsilon} \right) \right]^{1/\varepsilon}$

measures the aversion to inequality. In the GDI $\varepsilon = 2$. Thus, the general equation becomes:

$\text{Equally distributed index} = \left[ \left( \frac{\text{female population share} \times (\text{female index} - 1)}{1 - \varepsilon} \right) + \left( \frac{\text{male population share} \times (\text{male index} - 1)}{1 - \varepsilon} \right) \right]^{1/\varepsilon}$

which gives the harmonic mean of the female and male indices (Table 8 - columns 7 to 9). Third, GDI is calculated by combining the three equally distributed indices in an unweighted average (Table 8 - column 10).

\[^8\] If there were gender equality the GDI would equal the HDI.
While the HDI gives information about the quality of human life from a conglomerate perspective, the human poverty index (HPI) does so from the deprivation perspective. Nonetheless, both indexes go a step further from what the income indices (GDP and the Headcount index) can do (Sen and Anand, 1997).

For the purposes of measuring the multidimensional poverty, we used HPI-2 index:

Table 9: Human Poverty Index (HPI-2) for Macedonia

<table>
<thead>
<tr>
<th>Probability at birth of not surviving to age of 60 (times 100)</th>
<th>Adults lacking functional literacy skills</th>
<th>Population below income poverty line (50% of median adjusted household disposable income)</th>
<th>Rate of long-term unemployment (lasting 12 months or more)</th>
<th>HPI-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3</td>
<td>42.2</td>
<td>23.37</td>
<td>63.6</td>
<td>44.3</td>
</tr>
</tbody>
</table>

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

The HPI-2 shows that on the average 44.3% of the total population in the country is affected by various forms or deficits in respect of human poverty included in the index. The high HPI-2 is mainly a result of the high rate of long-term unemployment (63.6%), which is 6 to 10 times higher than in the highly developed countries, as well as of the high percentage of functionally illiterate people, which amounts to 42.2%, and is 2.5 to 7 times higher than in the highly-developed countries.

4. Concluding remarks

Human development index (HDI) for Macedonia, as a measure of the average achievements in the field of human development, counts 0793, which ranks Mace-

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9 The formula for calculating the HPI-2 is as follows:

\[ HPI-2 = \left[ \frac{1}{3} \left( P_1^n + P_2^n + P_3^n + P_4^n \right) \right]^{\frac{1}{n}} \]

Where:
- \( P_1 \) = probability at birth of not surviving to age of 60 (times 100);
- \( P_2 \) = adults lacking functional literacy skills;
- \( P_3 \) = population below income poverty line (50% of median adjusted household disposable income);
- \( P_4 \) = rate of long-term unemployment (lasting 12 months or more);
- \( \alpha = 3 \)

10 Data based on Labour Force Survey and our estimations.
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, which can not be said about the Central and Eastern European countries.

The HDI at the level of aggregated urban and rural municipalities shows significant disparities between different types of municipalities. The HDI for urban municipalities reaches (0.796), while the one of rural municipalities reaches only (0.765). The most significant difference is related to the knowledge component.

The Gender Development Index (GDI) shows only minimal deviation between genders (0.783) and the inequality is most pronounced in income component (revenues generated by men and women). It puts Macedonia in the middle of the World ranking list.

Human Poverty Index (HPI-2) shows that on the average 44.3% of the total population in the country are affected by various forms or deficits included in this measure. The high HPI-2 is mainly a result of the high rate of long-term unemployment which is one of the highest in Europe - 63.6%.

HDI height, in the case of Macedonia, confirms the hypothesis that 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 is mainly result of the inequality in the distribution of the benefits among the population.

Our general conclusion is 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.

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.

The creators of macroeconomic policy should have in mind that the 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.
Finally, the economic growth should ultimately result in improved quality of human life, or, more precisely, human development. The goal is, through placing the human beings in the focus of development efforts, to expand all human capabilities. People should be given opportunities and chances to participate in the economic activities, while at the same time enjoying the effects of the increased GDP. The quality of human life should be emphasized along with the quantitative aspects of the economic growth.

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Mjerenje kvaliteta života u Makedoniji - korištenjem indikatora humanog razvoja

Dimitar Eftimoski

Sažetak

Krajem 1980-tih, ključno pitanje razvoja bilo je fokusirano na rast dohotka umjesto na rast kvalitete života. Kao rezultat toga i razvojne strategije bile su orijentirane prema proizvodnji i nisu ostavljale dovoljno prostora blagostanja pojedinca.

Početkom 1990-tih pojavio se koncept humanog razvoja, naglašavajući jedinstvenu premisnu da ekonomski razvoj u krajnjem smislu treba rezultirati rastom kvalitete života ljudi, dok cilj razvojnog procesa treba biti širenje sposobnosti pojedinca, što se može postići jedino njihovim stavljanjem u fokus razvojnog procesa.

Rad je usredotočen na kvalitetu života stanovništva. Točnije, kao nadopunu dosadašnjim praksama izračunavanja indeksa humanog razvoja u Makedoniji (HDI) - kao pokazatelja kvalitete življenja, pokušat ćemo izračunati indeks siromaštva (HPI - 2) - kao pokazatelja nedohodovnog siromaštva, potom indeks razvoja prema spolu (GDI) - kao pokazatelja nejednakosti između muškaraca i žena, kao i zbirne indekse humanog razvoja za urbane i ruralne općine.

Predpostavka je da će sve to doprinijeti unapređenju kvalitete odluka državnih i lokalnih vlasti Makedonije za područje humanog razvoja.

Ključne riječi: humani razvoj, ekonomski razvoj, siromaštvo, razvoj prema spolu, kvalitet življenja

JEL klasifikacija: O15