

ПАНЕЛЬ 3. СТАТИСТИЧНІ ВИКЛИКИ ВИМІРЮВАННЯ ЦИФРОВОЇ ЕКОНОМІКИ

PROBLEMS OF STATISTICAL MEASUREMENT OF LIFE QUALITY LEVEL COMPONENTS

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The well-being of the population is one of the most important factors in the development of the country, which is why the issue of welfare is increasingly emerging as one of the most important to the states around the world. Increasingly relevant is the topic of raising the "level of happiness" in countries. However, the term "happiness" can be considered a philosophical concept, since there are many interpretations for its definition.

More than once, scientists in various fields of science have tried to make a list of what it takes for a person to be happy. For example, the Australian psychologist R. Cummins, comparing the results of thirty of the most recent studies on the phenomenon of happiness, achieved the following results - in order for a person to be happy, he needs three benefits: love, social activity (full connection with society) and prosperity. [1] Yet he or any other scientist would agree, that this is a general formula for happiness, for which there are exceptions. Some people mistakenly believe, that material wealth guarantee happiness, however, scientists have already proven, that there is a connection between happiness and wealth, but it is not linear, there is a saturation point, after which wealth increase leads to happiness decrease. So, it is important to understand that each individual has his own concept of "happiness".

As for macro level of this issue, government of most countries, especially with underdeveloped economy, mistakenly takes the economic indicators and wealth of the people as the basis for the life quality of the population. Although research shows, that in countries, where the focus is on production development and economic growth, people tend not to be any happier, because the economic theories held by the government of such states have nothing to do with the daily lives of real people. In fact, because of focus on the economic components of the "happiness level", very few people pay enough attention to the other components such as social, cultural and environmental. However, it is important to consider all factors influencing the well-being and happiness of the population.

Because of existing disputes over the question "which areas and industries are most important for improving the well-being of the country population?",

several indicators have been created to determine the life quality in countries. There are three most famous indices: the HAPPY PLANET INDEX, the WORLD HAPPINESS REPORT and the HUMAN DEVELOPMENT INDEX. All three indices determine the level and life quality of people, but differ by their compound components.

The most well-known and most widely used is the WORLD HAPPINESS REPORT. This report was created in 2012 by the UN Sustainability Development Team. In this report happiness level is calculated annually for each country in the range of 0 to 10. The index is determined by such indicators as longevity, freedom of choice, social support, trust in government (corruption level) and GDP per capita. [2]

Equally used is the HUMAN DEVELOPMENT INDEX. The HDI also rates countries by quality and standard of living, but using factors such as life expectancy, literacy rate per capita, and per capita purchasing power parity (PPP) in US dollars. [3]

Also well-known is the HAPPY PLANET INDEX. The purpose of this index is to show the relative effectiveness with which countries use economic growth and natural resources to ensure a happy life for the population. For the first time, the International Happiness Index was calculated in 2006. This index differs from others, because its creators emphasize, that although GDP and GNI show economic growth they do not reflect the actual level of human well-being and, because of that, these indicators of population wellbeing, are losing their credibility.

Therefore, calculating this index, scientists prefer to use such indicators as longevity, environmental footprint per capita and subjective level of welfare. Thus, the creators of the HAPPY PLANET INDEX emphasize that, it does not take wealth, measured by the level of GDP, for people to be happy, but health and a favorable environment. [4]

Importantly, all three indices differ from each other by its compound components, however, there are a couple common ones, which can be seen in the table 1.

Table 1.

Table comparing the components of the life quality indices

HAPPY PLANET INDEX	HUMAN DEVELOPMENT INDEX	WORLD HAPPINESS REPORT
<u>Longevity</u> Ecological footprint per capita	<u>Longevity</u> <u>Level of education / literacy</u> GNP per capita	<u>Longevity</u> <u>Level of education / literacy</u> GDP per capita Freedom of choice Social support Trust in government (level of corruption)

* by author based on data [2], [3], [4]

If we analyze the reports of these three indices in recent years, we can see that the leaders in each of them are different. For example, according to the World Happiness Report, Finland has been a leader for the last two years, according to the Human Development Index, Norway has taken the first the first place in 2018, and according to the World Happiness Index, which was last calculated in 2016, Costa Rica became the leader.

However, it is important to note that both Scandinavian countries, Finland and Norway have been among the top five in the Human Development Index and in the World Happiness Report for more than 5 years, just occasionally changing places. This is explained quite simply, because they are similar in economic and social system organization.

As for HPI rate, Costa Rica is the leader, because of its impressive environmental footprint level, and the country has a very insignificant difference with Finland`s and Norway's longevity level. However, an important factor was the subjective assessment of happiness by the population itself, due to the warm climate in the country and the location of the country among the Caribbean Sea and Pacific Ocean.

So, by analyzing the components and examining the results over the last couple of years on all three indices, we can conclude that countries governments around the world need to pay attention not only to economic indicators, but also to social, cultural and environmental ones. Because for the sake of maximum happiness and well-being of the population it is important to develop all factors, in particular, to pay special attention to the social policy of the country.

References

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SPECIFICS OF THE USE OF PROBIT AND LOGIT REGRESSION MODELS IN CLINICAL STUDIES: CASE STUDY COMPARATIVE ANALYSIS

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Logit and probit models are members of a generalized linear models family that is widely used to estimate the functional relationship between binary response variables and predictors [1]. Comparison of the regression models for binary