then NGOs with revenue from single revenue streams were considered to have revenue diversification index of one (1.00), while NGOs with equally divided revenue streams were considered to have revenue diversification index of zero (0.00). These indexes were coded to test possible interactions and relations between dependent variable of financial vulnerability and independent variables of number of revenue streams, tenure, size and managerial competence by using Ordinary Least Squares (OLS) regression method. Our findings show that number of revenue streams, tenure, size and managerial competence have influence on reducing financial vulnerability of Youth NGOs.

**Keywords:** Financial Vulnerability, Hirschman-Herfindahl Index (HHI), Revenue Diversification, Non-Governmental Organizations (NGOs), Turkey.

## The Model of Quantitative Assessment of the Regional Human Capital<sup>4</sup>

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## Abstract

The article suggests a model of quantitative assessment of human capital at the meso level. To assess the level of regional human capital, 30 indicators are classified and systematized into 6 aggregated groups: professionalism, education, scientific development, innovative development, health and culture. The justification of the proposed indicators' set is given. As an integral indicator of the regional human capital development, it is suggested to use a weighted average of the normalized proposed indicators. In comparison with the UN method based on the Human Development Index (HDI) evaluation, the proposed model significantly expanded the list of indicators of regional human capital for the groups: professionalism, education and regional health, Also, scientific and innovative development and culture groups were added. Information base of the research is made up of statistical data obtained from official information resources. The generated database contains the values of 49 indicators created for 85 regions of the Russian Federation in 2011-2016. For each subsample corresponding to a particular year, the regions' cluster analysis was conducted using the k-means method. The number of clusters into which the sample is divided is determined on the basis of the David-Baldwin indicator characterizing the quality of clustering. A meaningful description of each cluster is given; the strengths and weaknesses of clusters are revealed. The dynamics of the occurrence of regions in specific clusters is studied. Stable regions and regions wandering around the clusters depending on the time interval are identified. As a result of rating based on the proposed model, the leading regions for the development of human capital are identified. A comparison with the region's HDI rankings was made and a significant discrepancy in the results was revealed. Other conclusions relate to the rating for each aggregated group of indicators' and make it possible to identify the most problematic fields of a region. This will solve current problems and increase the value of regional human capital on the basis of the formation of an optimal portfolio of strategic activities aimed at the development of human capital. Further work is planned to elaborate the modeling tools for the human capital development at the meso level to allow forming an optimal set of strategic measures in order to maximize opportunities to achieve benchmarks of the region's social and economic development.

Keywords: Human Capital, Meso Level, Quantitative Model, Cluster Analysis, Rating of Regions

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