ASSESSMENT OF INTER-REGIONAL CONVERGENCE IN THE SOCIAL WELFARE BASED ON THE A. SEN FUNCTION: RUSSIAN CASE STUDY

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ABSTRACT

The aim of this study is estimation of social welfare in Russian regions in 2004-2014 based on the A. Sen abbreviated function, the assessment of regions convergence in welfare and factors contributing to it. We adjusted the A. Sen welfare function by the cost of living in regions and presented it as a four-factor multiplicative model. By use of the coefficient of variation (CV) we estimated the inter-regional inequality in welfare in statics and dynamics. The technique of decomposition of the squared CV for logarithm of welfare function enabled us to evaluate the contribution of main and intersect factors to Russian regions’ convergence in welfare. As a result we assessed Russian regions social welfare in dynamics and evaluated factors contributing to its growth. Based on the weighted CV we discovered the negative impact of the recession of 2009 on the regions convergence in welfare, and unweighted CV even more revealed the turning point in the convergence tendency occurring in 2012. We discovered that in statics the redistributive factor makes the greatest and increasing contribution to inter-regional convergence in welfare, whilst the cost of living and intra-regional income inequality factors have moderate and decreasing influence on it. The dynamic analysis revealed two factors predominantly contributing to regions' temporal convergence in welfare, namely growing convergence in GRP per capita and significant but unstable influence of distributive factor. Two other factors, the cost of living and intra-regional income inequality, counteracted to temporal convergence mainly due to attenuation of their negative correlation to nominal and real income per capita respectively. The results obtained may be applicable to both inter-budgetary and regional policy development.

Keywords: Abbreviated functions, Convergence, Decomposition, Factors, Inequality, Region, Coefficient of Variation, Welfare