

A Ranking of Human Development without Aggregation: An Alternative to the HDI

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Abstract

The purpose of this paper is to propose an alternative ranking to the Human Development Index (HDI) in order to eliminate some arbitrariness in the aggregation method of the HDI.

The method for calculating the HDI has been criticized for its implicit arbitrariness. It is said that there are no logical or statistical foundations for accepting the specific formulas. In spite of a number of criticisms and modifications, no previous work tried to provide an aggregation-free modification of the HDI. Here, I suggest an alternative method to rank human development levels of countries without aggregation.

This alternative ranking method uses the same indices as the HDI, though the procedure is quite different from it. The new aspect given by this ranking is to recognize incomparability of one human development indicator with another indicator. Based on the idea and applying Pareto Principle, the alternative ranking method was built. According to the method, the levels of development for 177 countries listed on the Human Development Report 2006 were finally re-ranked into sixteen order-groups. Due to the incomparability, the ranking does not result in a complete ordering but partial ordering leaving several countries incomparable.

By allowing for the incomparability, the alternative ranking can be regarded as a commonly acceptable minimum ranking since it does not force completeness on the ranking. This idea heavily depends on Amartya Sen's Intersection Approach. In addition, this incomparability enables to capture the diverse nature of human development.

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